The Journal of Bangladesh College of Physicians and Surgeons is a peer reviewed Journal. It is published three times in a year, (January, May and September). It accepts original articles, review articles, and case reports. Complimentary copies of the journal are sent to libraries of all medical and other relevant academic institutions in the country and selected institutions abroad.

While every effort is always made by the Editorial Board and the members of the Journal Committee to avoid inaccurate or misleading information appearing in the Journal of Bangladesh College of Physicians and Surgeons, information within the individual article are the responsibility of its author(s). The Journal of Bangladesh College of Physicians and Surgeons, its Editorial Board and Journal Committee accept no liability whatsoever for the consequences of any such inaccurate and misleading information, opinion or statement.
INFORMATION FOR AUTHORS


Aims and scope:
The Journal of Bangladesh College of Physicians and Surgeons is one of the premier clinical and laboratory based research journals in Bangladesh. Its international readership is increasing rapidly. It features the best clinical and laboratory based research on various disciplines of medical science to provide a place for medical scientists to relate experiences which will help others to render better patient care.

Conditions for submission of manuscript:
- All manuscripts are subject to peer-review.
- Manuscripts are received with the explicit understanding that they are not under simultaneous consideration by any other publication.
- Submission of a manuscript for publication implies the transfer of the copyright from the author to the publisher upon acceptance. Accepted manuscripts become the permanent property of the Journal of Bangladesh College of Physicians and Surgeons and may not be reproduced by any means in whole or in part without the written consent of the publisher.
- It is the author’s responsibility to obtain permission to reproduce illustrations, tables etc. from other publications.

Ethical aspects:
- Ethical aspect of the study will be very carefully considered at the time of assessment of the manuscript.
- Any manuscript that includes table, illustration or photograph that have been published earlier should accompany a letter of permission for re-publication from the author(s) of the publication and editor/publisher of the Journal where it was published earlier.
- Permission of the patients and/or their families to reproduce photographs of the patients where identity is not disguised should be sent with the manuscript. Otherwise the identity will be blackened out.

Preparation of manuscript:
Criteria:
Information provided in the manuscript are important and likely to be of interest to an international readership.

Preparation:
a) Manuscript should be written in English and typed on one side of A4 (290 x 210cm) size white paper.
b) Double spacing should be used throughout.
c) Margin should be 5 cm for the header and 2.5 cm for the remainder.
d) Style should be that of modified Vancouver.
e) Each of the following section should begin on separate page:
   - Title page
   - Summary/abstract
   - Text
   - Acknowledgement
   - References
   - Tables and legends.
f) Pages should be numbered consecutively at the upper right hand corner of each page beginning with the title page.

Title Page:
The title page should contain:
- Title of the article (should be concise, informative and self-explanatory).
- Name of each author with highest academic degree
- Name of the department and institute where the work was carried out
- Name and address of the author to whom correspondence regarding manuscript to be made
- Name and address of the author to whom request for reprint should be addressed

Summary/Abstract:
The summary/abstract of the manuscript:
- Should be informative
- Should be limited to less than 200 words
- Should be suitable for use by abstracting journals and include data on the problem, materials and method, results and conclusion.
- Should emphasize mainly on new and important aspects of the study
- Should contain only approved abbreviations
Introduction:
The introduction will acquaint the readers with the problem and it should include:
- Nature and purpose of the study
- Rationale of the study/observation
- Strictly pertinent references
- Brief review of the subject excepting data and conclusion

Materials and method:
This section of the study should be very clear and describe:
- The selection criteria of the study population including controls (if any).
- The methods and the apparatus used in the research.
- The procedure of the study in such a detail so that other worker can reproduce the results.
- Previously published methods (if applicable) with appropriate citations.

Results:
The findings of the research should be described here and it should be:
- Presented in logical sequence in the text, tables and illustrations.
- Described without comment.
- Supplemented by concise textual description of the data presented in tables and figures where it is necessary.

Tables:
During preparation of tables following principles should be followed
- Tables should be simple, self-explanatory and supplement, not duplicate the text.
- Each table should have a title and typed in double space in separate sheet.
- They should be numbered consecutively with roman numerical in order of text. Page number should be in the upper right corner.
- If abbreviations are to be used, they should be explained in footnotes.

Illustrations:
Only those illustrations that clarify and increase the understanding of the text should be used and:
- All illustrations must be numbered and cited in the text.
- Print photograph of each illustration should be submitted.
- Figure number, title of manuscript, name of corresponding author and arrow indicating the top should be typed on a sticky label and affixed on the back of each illustration.

Original drawings, graphs, charts and lettering should be prepared on an illustration board or high-grade white drawing paper by an experienced medical illustrator.

Figures and photographs:
The figures and photographs:
- Should be used only where data can not be expressed in any other form
- Should be unmounted glossy print in sharp focus, 12.7 x 17.3 cms in size.
- Should bear number, title of manuscript, name of corresponding author and arrow indicating the top on a sticky label and affixed on the back of each illustration.

Legend:
The legend:
- Must be typed in a separate sheet of paper.
- Photomicrographs should indicate the magnification, internal scale and the method of staining.

Units:
- All scientific units should be expressed in System International (SI) units.
- All drugs should be mentioned in their generic form. The commercial name may however be used within brackets.

Discussion:
The discussion section should reflect:
- The authors’ comment on the results and to relate them to those of other authors.
- The relevance to experimental research or clinical practice.
- Well founded arguments.

References:
This section of the manuscript:
- Should be numbered consecutively in the order in which they are mentioned in the text.
- Should be identified in the text by superscript in Arabic numerical.
- Should use the form of references adopted by US National Library of Medicine and used in Index Medicus.

Acknowledgements:
Individuals, organizations or bodies may be acknowledged in the article and may include:
- Name (or a list) of funding bodies.
- Name of the organization(s) and individual(s) with their consent.

Manuscript submission:
Manuscript should be submitted to the Editor-in-Chief and must be accompanied by a covering letter and following inclusions:
a) A statement regarding the type of article being submitted.
b) A statement that the work has not been published or submitted for publication elsewhere.
c) A statement of financial or other relationships that might lead to a conflict of interests.
d) A statement that the manuscript has been read, approved and signed by all authors.
e) A letter from the head of the institution where the work has been carried out stating that the work has been carried out in that institute and there is no objection to its publication in this journal.
f) If the article is a whole or part of the dissertation or thesis submitted for diploma/degree, it should be mentioned in detail and in this case the name of the investigator and guide must be specifically mentioned.

Submissions must be in triplicates with four sets of illustrations. Text must be additionally submitted in a CD.

Editing and peer review:
All submitted manuscripts are subject to scrutiny by the Editor in-chief or any member of the Editorial Board. Manuscripts containing materials without sufficient scientific value and of a priority issue, or not fulfilling the requirement for publication may be rejected or it may be sent back to the author(s) for resubmission with necessary modifications to suit one of the submission categories. Manuscripts fulfilling the requirements and found suitable for consideration are sent for peer review. Submissions, found suitable for publication by the reviewer, may need revision/ modifications before being finally accepted. Editorial Board finally decides upon the publishability of the reviewed and revised/modified submission. Proof of accepted manuscript may be sent to the authors, and should be corrected and returned to the editorial office within one week. No addition to the manuscript at this stage will be accepted. All accepted manuscript are edited according to the Journal’s style.

Reprints for the author(s):
Ten copies of each published article will be provided to the corresponding author free of cost. Additional reprints may be obtained by prior request and only on necessary payment.

Subscription information:
Journal of Bangladesh College of Physicians and Surgeons
ISSN 1015-0870
Published by the Editor-in-Chief three times a year in January, May and September

Annual Subscription
Local BDT = 300.00
Overseas $ = 30.00

Subscription request should be sent to:
Editor-in-Chief
Journal of Bangladesh College of Physicians and Surgeons
67, Shaheed Tajuddin Ahmed Sarani
Mohakhali, Dhaka-1212.

Any change in address of the subscriber should be notified at least 6-8 weeks before the subsequent issue is published mentioning both old and new addresses.

Communication for manuscript submission:
Communication information for all correspondence is always printed in the title page of the journal. Any additional information or any other inquiry relating to submission of the article the Editor-in-Chief or the Journal office may be contacted.

Copyright :
No part of the materials published in this journal may be reproduced, stored in a retrieval system or transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without the prior written permission of the publisher.

Reprints of any article in the Journal will be available from the publisher.
# CONTENTS

## EDITORIAL

Autism Spectrum Disorders  
Md Mizanur Rahman  

## ORIGINAL ARTICLES

Presentation and Immediate Outcome of Surgical Treatment of Patients with Carcinoma of the Stomach – A Comparative Study between Young and Elderly patients  
SA Chowdhury, MM Hussain, J Ahmed  

Student’s Opinion Towards the Assessment System of Revised Undergraduate Medical Curriculum - An Experience in A Private Medical College  
R Nazneen, HK Talukder, MZ Hossain  

Estrogen Receptor, Progesterone Receptor, and Her-2/neu Oncogene Expression in Breast Cancers Among Bangladeshi Women  
MG Mostafa, MT Larsen, RR Love  

Gestational Age Predicted by Femur Length in Bangladesh  
SQ Rashid  

## REVIEW ARTICLES

The Role of Mirena (Intra-uterine progestogens), Other than Contraceptive benefits: Current Concepts and Practices  
I Bina  

Evaluation & Management of Obscure Gastrointestinal Bleeding (OGIB)  
S Perveen, MR Hossain, SMB Hussain, MA Ahmed, H Aftab  

## CASE REPORTS

Non-Coronary Aortic Sinus Dilatation with Aortic Regurgitation in a Marfan’s Syndrome Patient – A Case Report  
M Siraj, MH Rahman  

Adrenoleukodystrophy: A Rare Case Report  
MBA Mondol, MMR Siddiqui, L Wahab, MA Hoque, SU Khan, KM Rahman, QD Mohammad  

Goldenhar Syndrome-A Case Report  
MAR Siddique, J Hossain, MJ Abedin, M Parvez  

Pregnancy with Idiopathic Thrombocytopenic Purpura - A Case Report  
R Akther, T Hossain, MA Khan, Maliha Rashid  

## SHORT COMMUNICATION

Bezoar, A Rare Cause of Gastrointestinal Obstruction  
MM Hussain, CA Kawser  

## IMAGES IN MEDICAL PRACTICE

MMR Siddiqui, QT Islam, A Hossain, MS Mahbub  

## LETTER TO THE EDITOR

## COLLEGE NEWS

## FROM THE DESK OF THE EDITOR IN CHIEF

## NAME OF THE REVIEWER OF ARTICLES IN THIS ISSUE

## OBITUARY
Autism Spectrum Disorders

Autism Spectrum Disorders (ASD) are cognitive and neurobehavioural disorders, having three core features: deficits in socialization, deficits in verbal & nonverbal communication and restricted and repetitive patterns of behaviours\(^1\). These disorders manifest in early childhood and are likely to last the life time of the person. In 1943, Dr.Leo Kanner of the Jhon Hopkins Hospital, was the first to describe the syndrome of autistic disturbances.\(^1\) However, over the period it is recognized as a spectrum of disorder that includes: Childhood autism, Asperger’s syndrome, childhood disintegrative disorder, Rett’s syndrome and pervasive developmental disorders - not otherwise specified\(^1\).

Until recently, autism was thought to be rare. Earlier, prevalence was considered to be 2 to 4 cases per 10,000 children\(^1\). Currently, it is estimated that the prevalence is as high as 1 in 150 individuals in USA\(^2\). Extrapolated on the basis of above figure, in Bangladesh nearly 10.5 lakhs individuals may have autism. However, there is no national epidemiological study on autism in Bangladesh. In the centre for Child Development and Autism at Bangabandhu Sheikh Mujib Medical University only 12 children attended with autism in the year 2001, which increased to 105 children in 2009 suggesting probable prevalence, awareness amongst parents and probably increased capability of the paediatricians to diagnose the problem.

It is felt that there may be a definite increase in the incidence of Autism spectrum disorders all over the world. It has no racial, ethnic or social boundaries. Better diagnostic facilities and greater awareness increase the yield of diagnosis of ASD. Environmental and perinatal factors along with genetic predispositions are the main etiologic determinants\(^3\). However, there is a clear agreement that the disorder may be associated with structural and functional abnormalities in several areas of the brain, suggesting that a disruption in fetal brain development contributes to the disorder\(^4\). The “growth dysregulation hypothesis” holds that the anatomical abnormalities seen in autism are caused by genetic defects in brain growth factors\(^5\). The previous observation that MMR vaccine may be associated with autism has been proved untrue\(^4\). Lack of breast feeding have been found to be a risk factor in autism\(^6\). There is no effect of family income, life style and education on prevalence of autism. ASD is also not related to parenting style.

Investigations are not always indicated. Electroencephalography and a neurology referral are indicated in children with suspected seizures or those who have symptoms of regression. Lead screening, DNA analysis, high-resolution chromosome analysis, and referral to a geneticist may be considered in specific situation\(^1,4\).

Though there is a myth that there is no cure for autism, one can improve the quality of life of autistic children by various methods like sensory integration therapy, applied behaviour analysis and auditory integration therapy\(^1,4\). Approximately 10% of the autistic individuals have savant abilities. People with ASD have emotional feelings and are able to love & feel loved. They care deeply but lack the ability to spontaneously develop empathic behavior. They do not prefer self isolate rather they want to interact socially; but lack the ability to spontaneously develop effective social interaction skills. They can learn social skills if they receive specialized training. With appropriate treatment, almost 50% of individuals with autism will become indistinguishable from the mainstream population. Many others will develop independent living skills and can live successfully and can contribute and small numbers will require support throughout their lives.

They may need medical management for associated conditions like epilepsy, hyperactivity, gastrointestinal problems, sleep disturbances, anxiety and depression, when indicated\(^4\). Management of ASD also depends on educating and empowering clinicians to recognize the wide spectrum of symptoms that ASD now comprises.
and use standardized developmental and ASD-specific screening and diagnostic tools. Well-child visit during toddler and preschool years is needed to exclude ASD\(^1\). The earlier ASD is diagnosed & treated, the better is outcome. It is neither to be hidden and nor to “wait and see” and neglect.

But for this one need to educate and empower parents, develop facilities for early diagnosis and management/training of patient and parents, and lastly motivate the society to become caring and attentive to the need of these children.

*(J Bangladesh Coll Phys Surg 2010; 28: 143-144)*

**Professor Md Mizanur Rahman**
Professor Paediatric Neurology, Bangabandhu Sheikh Mujib Medical University, Shahbag, Dhaka-1000.

**References:**
Presentation and Immediate Outcome of Surgical Treatment of Patients with Carcinoma of the Stomach – A Comparative Study between Young and Elderly patients

SA CHOWDHURYa, MM HUSSAINb, J AHMEDc

A total of 86 cases were included in this study. 14 were from below 40 years (young group) and 72 were above 40 years (elderly group). Young patients had less definitive symptoms than elderly group. Pain (85.71%) and vomiting (78%) were the most prominent symptoms in both the groups. But in elderly a significant number 54(75%) of cases had anorexia. Lump and visible peristalsis were present in both groups in approximately similar proportion. Histopathologically younger patients had more aggressive disease than the elderly group.

The operability in carcinoma of the stomach was more in young group probably due to physical fitness of patient. In both the groups antrum was the commonest site of malignancy. The incidence of malignancy in body was more in young patients. In young group tumor status was T4 in 54.5% and in elderly group 56% was in T4 stage. 80% had lymph node involvement in both the groups. Resection was possible in young group in about 90% and gastrojejunostomy in 9.09% cases. Conversely, in the elderly group resection was possible in 58% and gastrojejunostomy was done in 42% cases. Total gastrectomy was done in 18.18% in young group and 4% in elderly group. Another important finding was partial gastrectomy was done in 72.73% in young but 46% in elderly only. The mortality was more (18.2%) in young group in comparison to (10%) in elderly.

Gastric carcinoma was found more aggressive in young with high mortality and morbidity. Efforts should be taken for early diagnosis and prompt surgical treatment.

are histological types, location of primary site and metastasis.

A study was conducted to compare the clinical presentation, operative findings and outcome of surgery between two age groups of patients presenting as carcinoma stomach.

**Materials and Method:**

This was a prospective quasi experimental study. The study was carried out in the Department of Surgery, Chittagong Medical College & Hospital. The study was undertaken during the period of May 2002 to December 2003. Cases were selected consecutively following the inclusion and exclusion criteria. Evaluation of patients was based on history, physical examinations and investigations. For analysis of results patients were divided into two groups as Group A, below 40 years and Group B above 40 years of age.

**a) Inclusion Criteria:** Patient of either sex admitted with presentations suggestive of carcinoma of the stomach and histopathologically confirmed from tissue obtained by endoscopy.

**b) Exclusion Criteria:** Histopathologically negative cases were excluded.

Patients were admitted from surgical out-patient departments after clinical diagnosis of Carcinoma of the stomach. Some of these patients had tissue confirmation before being admitted. Referred patients from medical units after diagnosis of Carcinoma of the stomach were also included.

Preoperative clinical assessment included detailed history regarding presenting illness, dietary pattern and personal habits. Meticulous systematic physical examination was performed in each case. Ultrasonography was done to detect secondary deposits in liver, involvement of lymph nodes and presence of ascitis. Radioisotope scan of liver and bone was obtained in relevant cases. All relevant information were recorded methodically and carefully as far as possible in pre-designed data sheet for each individual case.

During laparotomy tumor size, serosal involvement, hepatic metastasis, lymph node involvement including group, size and number, peritoneal metastasis and ascitis were observed and recorded in detail. Specimen was obtained in every operated case for histopathological reconfirmation.

Operability was judged on the basis of clinical and investigation findings. All had palliative surgery. The operative procedures included total gastrectomy, proximal or distal partial gastrectomy, subtotal gastrectomy and gastrojejunostomy along with removal of lymph nodes based on findings at laparotomy.

Post-operatively all patients were monitored carefully and complications were recorded. All the patients got 1st cycle chemotherapy as per advice of Oncologist.

**Statistical analysis**

Statistical analysis was done manually and by using computer statistical software package SPSS-10.0 for windows 2000 (SPSS-Statistical Programme for Scientific Study). ‘Unpaired t’ tests were done where applicable. P values less than 0.05 was considered as significant, by setting the minimal level of statistical significance at 5%.

**Ethical issues**

Permission for the study was duly obtained from Ethical Committee of Chittagong Medical College. On ethical consideration the patients were first explained about the treatment procedures with their possible outcome. Informed written consent was taken from them.

**Results:**

A total of 86 patients were included in the study. Only 14 (16.3%) cases were below 40 years (Group A) and 72 (83.7%) cases were above 40 years (Group B). The male: female ratio was 2.58:1

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Group A*</th>
<th>Group B*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyspepsia</td>
<td>02(14.28)</td>
<td>34 (47.22)</td>
</tr>
<tr>
<td>Pain in the abdomen</td>
<td>12(85.71%)</td>
<td>52(72.22)%</td>
</tr>
<tr>
<td>Vomiting</td>
<td>11 (78%)</td>
<td>54 (75)</td>
</tr>
<tr>
<td>Hemetemesis and Melena</td>
<td>00</td>
<td>05(6.94)</td>
</tr>
<tr>
<td>Lump in the abdomen</td>
<td>06(42.85%)</td>
<td>18(25)</td>
</tr>
<tr>
<td>Anorexia</td>
<td>07 (50%)</td>
<td>54 (75)</td>
</tr>
<tr>
<td>Gen. weakness</td>
<td>07(50%)</td>
<td>43 (59.72)</td>
</tr>
<tr>
<td>Smoking</td>
<td>6 (43 %)</td>
<td>41 (57%)</td>
</tr>
<tr>
<td>Smoked and Salted fish</td>
<td>7 (50 %)</td>
<td>26 (36 %)</td>
</tr>
</tbody>
</table>

* Figures in parentheses represent percentages
In Group A, 12 (85.7%) patients and in Group B, 52 (72.2%) patients had pain in abdomen. Vomiting was present in 78% and 75% cases of group A and B respectively.

07 (50%) patients of group A and 26 (36.11%) patients of group B consumed smoked and salted fish. Similarly 06 (42.86%) group A and 41 (56.94%) group B cases were smoker.

Table-II

<table>
<thead>
<tr>
<th>Clinical Examination findings of two groups</th>
<th>Group A* (n=14)</th>
<th>Group B* (n=72)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Examination Findings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anemia</td>
<td>09(64.28)</td>
<td>67(93.06)</td>
</tr>
<tr>
<td>Jaundice</td>
<td>01(7.14)</td>
<td>02(02.78)</td>
</tr>
<tr>
<td>Dehydration</td>
<td>05(45.71)</td>
<td>08(11.11)</td>
</tr>
<tr>
<td>Supraclavicular LN</td>
<td>01(7.14)</td>
<td>02(02.78)</td>
</tr>
<tr>
<td>Loco-regional Examination Findings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lump</td>
<td>07(50)</td>
<td>43(59.72)</td>
</tr>
<tr>
<td>Ascites</td>
<td>02(14.28)</td>
<td>13(18.06)</td>
</tr>
<tr>
<td>Liver</td>
<td>00</td>
<td>04(5.56)</td>
</tr>
</tbody>
</table>

· Figures in parentheses represent percentages

Table III shows that 67 (93.06) cases of group B was anaemic. Lump was present in 07(50%) of group A patients and 43(59.71%) group B patients, and visible peristalsis 05(35.71%) and 23 (31.94%) cases respectively.

Ba-meal study was done in all the 86 cases. 06(57.14%) group A and 34 (66.67%) group B cases were positive for carcinoma of stomach by Ba-meal examination.

Endoscopic Examination
On endoscopy 92.86% of group A and 95.83% of group B patients had lesions suggestive of gastric carcinoma. Tissue biopsy was taken from all the cases. Poorly differentiated carcinoma stomach was found in 35.71% of group A and 41.14% of group B patients. The histopathological findings were inconclusive only in 1 patient of group A and 16 (22.86) cases of group B patients.

Surgical management
Exploration was done in 61 out of 86 patients of carcinoma of the stomach. Palliative procedure was possible on 78.57% of group A patients 69.44% in group B patients.

In both the groups’ maximum number of tumour was in the antrum. The growth was present in the antrum in 63.6% of cases in group A and 78% in group B. 36.4% patients of Group A and 14% patients of Group B patients had growth in body of the stomach. Growth in cardia (8%) was found only in elderly (group B) patients.

Tumor status as observed during exploration, was recorded according to TNM classification. T3 stage was present in 05 of 11 in group A (45.45%) and 13 of 50 (26%) of cases present in elderly (group B) patients. T4 status was present in 06 of group A (54.55%) and 28 (56%) of 50 cases of group B. Findings were significant (p value <0.05). This comparison is shown in Table IV.

Table-III

<table>
<thead>
<tr>
<th>Endoscopic Biopsy Results of two groups of patients</th>
<th>Group A (%)N=14</th>
<th>Group B (%)N=70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endoscopic Biopsy Report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Well differentiated</td>
<td>04 (28.57)</td>
<td>06 (08.57)</td>
</tr>
<tr>
<td>Moderately differentiated</td>
<td>02 (14.29)</td>
<td>14 (20)</td>
</tr>
<tr>
<td>Poorly differentiated</td>
<td>05 (35.71)</td>
<td>33 (41.14)</td>
</tr>
<tr>
<td>Diffuse</td>
<td>02 (14.29)</td>
<td>01 (01.430)</td>
</tr>
<tr>
<td>Inconclusive</td>
<td>01 (07.14)</td>
<td>16 (22.86)</td>
</tr>
<tr>
<td>USG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liver metastasis</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Ascitis</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Lymphadenopathy</td>
<td>6</td>
<td>37</td>
</tr>
<tr>
<td>Ba meal</td>
<td>06 (33%)</td>
<td>34 (66.6%)</td>
</tr>
</tbody>
</table>

· Figures in parentheses represent percentages
**Table- IV**

<table>
<thead>
<tr>
<th>Tumor Status</th>
<th>Group A (%)</th>
<th>Group B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T2</td>
<td>00</td>
<td>09(18)</td>
</tr>
<tr>
<td>T3</td>
<td>05(45.45)</td>
<td>13(26)</td>
</tr>
<tr>
<td>T4</td>
<td>06(54.55)</td>
<td>28(56)</td>
</tr>
</tbody>
</table>

*Note - there was no patients with T1 tumor
*Figures in parentheses represent percentages

Lymph node involvement was present in 09(81.82%) of Group A and 46(92%) of Group B cases. Peritoneal involvement was present in 01 (09.09%) and 09 (18%) cases of Group A and Group B respectively. Hepatic involvement was found in 02(18.18%) and 09(18%) of cases of Group A and Group B respectively. Nodal involvement of these patients with carcinoma of the stomach has been presented and compared in table V.

**Table-V**

<table>
<thead>
<tr>
<th>Lymph node status</th>
<th>Group A (%)</th>
<th>Group B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N0</td>
<td>02(18.18)</td>
<td>03(8)</td>
</tr>
<tr>
<td>N1</td>
<td>03(27.27)</td>
<td>18(30)</td>
</tr>
<tr>
<td>N2</td>
<td>06(45.45)</td>
<td>28(26)</td>
</tr>
<tr>
<td>NX</td>
<td>00</td>
<td>01(06)</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>50</td>
</tr>
</tbody>
</table>

As the patients presented with incurable tumor mass exploration was done with palliative intent. Resection was possible in 10 (90.91%) young patients ( group A ) and 29 (58%) elderly patients ( group B ). Procedures performed has been tabulated in table VI. 72.7% group A patients were treated by distal partial gastrectomy. Whereas group B patients were treated by distal partial gastrectomy in 46% and gastrojejunostomy in 42% cases. p value >0.05.

**Table-VI**

<table>
<thead>
<tr>
<th>Extent of Resection in Patients with Ca-stomach</th>
<th>Group A (%)</th>
<th>Group B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total gastrectomy</td>
<td>02(18.18)</td>
<td>02(4)</td>
</tr>
<tr>
<td>Proximal partial gastrectomy</td>
<td>00</td>
<td>03(6)</td>
</tr>
<tr>
<td>Distal partial gastrectomy</td>
<td>08(72.73)</td>
<td>23(46)</td>
</tr>
<tr>
<td>Distal subtotal gastrectomy</td>
<td>00</td>
<td>01(2)</td>
</tr>
<tr>
<td>Gastrojejunostomy</td>
<td>01(9.09)</td>
<td>21(42)</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>50</td>
</tr>
</tbody>
</table>

The mortality was 02 (18.18%) among group A and in 05 (10%) in group B. Postoperative complications developed in 16% patients of group B.

**Discussion:**

A total of 86 histopathologically confirmed cases were included in the present study. Among them 14 cases were included in young group of which 11 cases were operated. In elderly group 72 cases were included and 50 cases were operated. In 22 cases of elderly patients operation could not be done either for refusal of operation or extensive disease involvement.

In the present study the incidence of gastric carcinoma in young group was 16% ( 14 of 86 patients). In one review Milne et al 7, about 10% patients were found below 45 years and in another study it was 13.% in a series of 130 cases. The patients below 45 yea has been grouped as early onset gastric carcinoma ( EOGC ). Though the diagnosis of gastric neoplasm is sometimes reserved in young patients, symptoms observed in this age group did not differ from those in adults . Similar observations was also noted in this study. A recent study reported observations that early onset gastric carcinoma (EOGC) has molecular genetic profile different from elderly group of patients where environmental factors are held responsible for carcinogenesis. In another study, a statistically significant increase in number of patients below the age of forty years was seen in cancers involving oesopageo gastric junction in Indian subcontinent.

In the present study the main presenting symptoms were abdominal pain and anorexia in both the groups. Another study from Iran revealed abdominal pain and anorexia to be present in 95% of cases. Comparable pattern of
clinical features were reported from India, Pakistan and Nigeria. Tobacco smoking has a positive association while increasing consumption of vegetables and dietary products has a protective effect. Smoking was the prominent risk factors in both the groups but smoked and salted fish intake was more in younger group. In a cohort study, Poulsen and his co workers found association of proton pump inhibitors (PPI) and H2 receptor blockers with increased incidence of gastric carcinoma. PPI and H2 receptor blockers are available as over the counter drugs and are used randomly and indiscriminately. Effect of these drugs in our population could not be assessed in this study.

Half of the young patients and 43 (59.77 %) elderly cases had visible or palpable lump. Other studies showed similar observations in different countries. Ascites was present in 14.28% and 18.06% cases and hepatomegaly present in 05.56% cases only. Similar observation were reported from neighboring countries.

Endoscopy is investigation of choice for diagnosis of gastric carcinoma. Numerous reports had demonstrated that its accuracy of diagnosis was greater than 95%. Negative results were more common in younger age group in this series. Spiral CT scan has limited ability to identify lymph node metastases but can detect adjacent organ invasion. Whenever possible these modalities may be used for preoperative assessment. Endoscopic ultrasound has been found 80% and 68.8% accurate respectively for Tumor and Nodal status in a study in Korea. Pre operative assessment of nodal status therefore remains difficult and has low specificity but a combined approach might give better understanding and outcome.

Histopathologically in young patient’s malignancy were more aggressive than older group. The percentage of diffuse variety was more in young group and poorly differentiated were more in elderly group.

TNM staging was done in all the operated cases. In both the groups malignancy was in advanced state. T3 stage tumor was more in young group whereas, T4 was more common in the elderly group and was statistically significant. Involvement of peri gastric and extra gastric lymph nodes are found directly related to tumor size and depth of invasion. In a Japanese study lymph node involvement was 0% for tumors less than 1cm, it reached to 46% for peri gastric and 15% for extra gastric nodes for a 4 cm lesion. This also indicates early lymph node metastasis in carcinoma of the stomach. On the other hand a German study found no relationship with the size of lymph node and metastatic infiltration. Data from several large series indicate that 60% to 90% of patients had primary tumor presenting with involvement of the serosa or invading adjacent organs. In a study in India cancers were diagnosed in an advanced stage and 70% had serosal infiltration.

Early reporting and early diagnosis no doubt will improve results of treatment in any type of cancer. In Japan where gastric cancers are diagnosed at an early stage the results are admirable. Kitano has reported 100% resectability with T1A and T1B tumours with 5 year disease free survival of 99.8 for T1A and 98.7% for T1B gastric cancers following laparoscopic intervention. The reason for late presentation are many. One important issue in our patients may be due to vague symptoms and casual use of PPI and H2 receptor blockers as self medication. In an attempt to promote early presentation of cancers specially in disadvantaged communities Lyon and workers had an innovative approach of involving people in the community. This could improve reporting of breast cancer and bowel cancer. Similar strategy may improve early presentation in gastric cancers as well.

Lymph node involvement was greater in elderly group than young group of patients. The overall lymph node involvement was over 90%. Sunderlands described an 88% incidence of involvement of nodes with the proximal lesions. This was also observed in this series that lymph node involvement in younger patients were more rapid.

Resection was done in more than 90% young patients and 58% in older group. Resection was possible in significantly higher proportion of young patients. This may be due to involvement of body and involvement of fewer lymph nodes or due to more operative fitness in young group. Another factor might be less number of patients in this group.

The maximum palliative surgery was distal partial gastrectomy. Gastrojejunostomy done in older group was 21 (42%) cases. In other series by pass operation was done in 7.23% and 5% cases. In the present
study the mortality rate was 02(18%) in young patients and 05 (10%) in older patients. However, none of the operative procedure was statistically significant.

**Recommendation:**
More focused studies with more cases are required to identify risk factors and surgical outcome in both groups.

**Acknowledgement:**
This study was done in as a part of dissertation in partial fulfillment of FCPS part II examination in Surgery in Chittagong Medical College Hospital.

We are indebted to Professor K.Z. Mamun who has given his valuable time in statistical analysis and over all review of the paper.

**References:**
22. Yasuda K, Shirishi N, Sumatsu T, Yamaguchi K, Adachi Y, Kitano S. Rate of detection of lymph node metastasis is correlated with the depth of submucosal invasion in early stage gastric carcinoma ; Cancer 1999; 85 : 10; 2119 -23
28. Barr H, Greadell MJ. Carcinoma of the stomach; Morris PJ and Mac RA editor; Oxford Textbook of Surgery; vol.1; Oxford Medical Publication; 931-943.
Student’s Opinion Towards the Assessment System of Revised Undergraduate Medical Curriculum - An Experience in A Private Medical College

R NAZNEEn, HK TALUKDERb, MZ HOSSAINc

Summary:
Objectives: The aim of the study was to assess the attitude of the undergraduate medical students towards the assessment system of revised medical curriculum.

Materials and Methods: Study design: It was a descriptive cross sectional study. Study period: From February 2008 to April 2008.
Setting: Department of Obstetrics and Gynaecology in Holy Family Red Crescent Medical College and Hospital.
Sample size: Total 82 students were selected for the study out of which 70 participated.
Inclusion criteria: students who were selected for the final MBBS examination.
Exclusion Criteria: Students not qualified for final professional examination.
Procedure: During the placement of the students in the department of Obstetrics and Gynaecology, the basic idea of the old and the new curriculum was explained to them. The objective of the study was explained and a pretested questionnaire was given to each student. Identification of the student was not compulsory to maintain secrecy. 5 point Likert scales was used to measure the responses of the participants. Statistical analysis was done using the SPSS system version 11.

Results: Out of 82 students, 70 participated. Among them, 37.1% were male, and 48.6% were female students. 44.2% said that the curriculum and 35.7% said that the exam system is easy to follow, 47.1% wanted to have single subject and 65.7% wanted to have all the major subjects simultaneously in block posting. 74.1% said that the 6 hours learning period is tiring. 42.9% were in favour of 3-6 pm break, 64.3% were in favour of giving MOCK test weekly, 55.7% liked formative assessment test, 64.3% did not adopt any unfair means in the examination, 78.6% students are comfortable with MCQ, 81.4% with SAQ, about 41.5% with SEQ, 74.2% with OSPE, 71.5% with SOE and 77.2% liked Clinical examination.

Key Words: Undergraduate medical Curriculum, Students opinion.

Introduction:
Many leading medical schools in the world have extensively revised their respective course curriculum to prepare ‘Today’s Medical Students’ to become ‘Tomorrow’s Doctors’1. Medical curricula need to be defined in accordance to the needs of specific communities. Skills and attitude components have recently started receiving such attention in curricula. The concern is growing that the teaching and assessment of clinical skills lacks uniformity and that the skills of the medical graduates are far from expectations of the stake holders2. A number of cross-cultural studies have looked closely at the study approaches using Biggs’ Study Process Questionnaire (SPQ) in various countries worldwide including Asia.

Study has been done using revised version of the questionnaire (R-SPQ-2F) among the Pakistani students in tertiary institutions3. But the scenario is a little different in our settings. After the adoption of the new curriculum in the medical colleges all over the country, students have become frustrated and worried4. In the new system, every professional examination will be held two times in a year after six months. In this system, pass marks has been fixed at sixty per cent. Since the Faculty of medicine has gone through a successful revolution in launching the new MBBS curriculum in 2002, now on the verge of final professional examination, few opinions has arisen from the final year students regarding their adaptation with the curriculum.
With that point in mind this study has been done to assess their opinion about it.

**Objectives of the study:**
- The aim of the study was to know the opinion of the undergraduate medical students towards the assessment system of revised medical curriculum.
- To analyze the student’s evaluation and implementation of the idea to overcome the shortcomings of teaching curriculum.

**Materials and Methods:**
Study design: It was a descriptive cross sectional study.
Setting: Department of Obstetrics and Gynaecology in Holy Family Red Crescent Medical College and Hospital. Sample size: Total 82 students of were selected for the study out of which 70 participated. Inclusion criteria: Students who were selected for the final MBBS exam. Exclusion Criteria: Students ineligible for the final professional examination. Procedure: A total of 70 students participated in the study. During the placement of the students in the department of Obstetrics and Gynaecology, the basic idea of the old and the new curriculum was explained to them. Students were informed of the role that their feedback plays an important role in changing the curriculum. The objective of the study was explained and a pretested questionnaire was given to each of them. Identification of the student was not compulsory for privacy issue. At the end of the placement, students filled up the questionnaire to give their opinion regarding the curriculum and also their attitude towards it. The questionnaire consisted of 14 statements. The respondents had to indicate their degree of agreement with the individual statements using a 5 point Likert scale. Statistical analysis was done using the SPSS system version 11.

**Result:**

<table>
<thead>
<tr>
<th>Table-I</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distribution of the respondents as per their Gender:</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>26</td>
<td>37.1</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>48.6</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>85.7</td>
</tr>
<tr>
<td>Missing System</td>
<td>10</td>
<td>14.3</td>
</tr>
<tr>
<td>Grand total</td>
<td>70</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table-II

<table>
<thead>
<tr>
<th>Different events of revised curriculum</th>
<th>Level of opinions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Simplicity of Present curriculum F %</td>
<td>2 2.9</td>
</tr>
<tr>
<td>Simplicity of Examination system F %</td>
<td>3 4.3</td>
</tr>
<tr>
<td>Block posting in 1 subject per rotation is help full for learning F %</td>
<td>8 11.4</td>
</tr>
<tr>
<td>Bl. posting should contain all the major subjects in single rotation F %</td>
<td>5 7.1</td>
</tr>
<tr>
<td>Learning hours F %</td>
<td>4 5.7</td>
</tr>
<tr>
<td>3-6 pm break will be better for learning F %</td>
<td>10 14.3</td>
</tr>
</tbody>
</table>

*F- Frequency, % = Percentage.
### Table-III

*Distribution of the respondents according to different aspects of examination system. (n=70).*

<table>
<thead>
<tr>
<th></th>
<th>Weekly</th>
<th>Twice a month</th>
<th>Once a month</th>
<th>Total</th>
<th>Missing system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of taking mock tests</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>45</td>
<td>12</td>
<td>3</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td>%</td>
<td>64.3%</td>
<td>17.1%</td>
<td>4.3%</td>
<td>85.7%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Liking of formative assessment examination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>39</td>
<td>16</td>
<td></td>
<td>55</td>
<td>15</td>
</tr>
<tr>
<td>%</td>
<td>55.7%</td>
<td>22.9%</td>
<td></td>
<td>78.6%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Adoption of any unfair means in the exam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>3</td>
<td>45</td>
<td></td>
<td>48</td>
<td>22</td>
</tr>
<tr>
<td>%</td>
<td>4.3%</td>
<td>64.3%</td>
<td></td>
<td>68.6%</td>
<td>31.4%</td>
</tr>
<tr>
<td>Saw others to do the same</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>21</td>
<td>34</td>
<td></td>
<td>55</td>
<td>15</td>
</tr>
<tr>
<td>%</td>
<td>30.0%</td>
<td>48.6%</td>
<td></td>
<td>78.6%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Having sufficient time for study</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>8</td>
<td>51</td>
<td></td>
<td>59</td>
<td>11</td>
</tr>
<tr>
<td>%</td>
<td>11.4%</td>
<td>72.9%</td>
<td></td>
<td>84.3%</td>
<td>15.7%</td>
</tr>
</tbody>
</table>

* F- Frequency, % = Percentage

### Table-IV

*Distribution of the respondents as per comfortableness in different type of assessment examination. (n=70).*

<table>
<thead>
<tr>
<th>Type of examination</th>
<th>Highly comfortable</th>
<th>Comfortable</th>
<th>Mildly comfortable</th>
<th>Not comfortable</th>
<th>Don’t know</th>
<th>Total</th>
<th>Missing System</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCQ</td>
<td>F</td>
<td>30</td>
<td>18</td>
<td>7</td>
<td>5</td>
<td>0</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>42.9%</td>
<td>25.7%</td>
<td>10.0%</td>
<td>7.1%</td>
<td>0</td>
<td>85.7%</td>
</tr>
<tr>
<td>SAQ</td>
<td>F</td>
<td>16</td>
<td>33</td>
<td>8</td>
<td>3</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>22.9%</td>
<td>47.1%</td>
<td>11.4%</td>
<td>4.3%</td>
<td>85.7%</td>
<td>14.3%</td>
</tr>
<tr>
<td>SEQ</td>
<td>F</td>
<td>13</td>
<td>16</td>
<td>29</td>
<td>1</td>
<td>59</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>18.6%</td>
<td>22.9%</td>
<td>41.4%</td>
<td>1.4%</td>
<td>84.3%</td>
<td>15.7%</td>
</tr>
<tr>
<td>OSPE</td>
<td>F</td>
<td>11</td>
<td>26</td>
<td>15</td>
<td>6</td>
<td>1</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>15.7%</td>
<td>37.1%</td>
<td>21.4%</td>
<td>8.6%</td>
<td>1.4%</td>
<td>84.3%</td>
</tr>
<tr>
<td>SOE</td>
<td>F</td>
<td>4</td>
<td>23</td>
<td>23</td>
<td>3</td>
<td>5</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>5.7%</td>
<td>32.9%</td>
<td>32.9%</td>
<td>4.3%</td>
<td>7.1%</td>
<td>82.9%</td>
</tr>
<tr>
<td>Clinical examination</td>
<td>F</td>
<td>13</td>
<td>25</td>
<td>16</td>
<td>4</td>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>18.6%</td>
<td>35.7%</td>
<td>22.9%</td>
<td>5.7%</td>
<td>2.9%</td>
<td>85.7%</td>
</tr>
</tbody>
</table>

* F- Frequency, % = Percentage

MCQ-Multiple Choice Question, SAQ-Short Answer Question, SEQ-Structured Essay Question, OSPE-Objective Structured Practical Examination, SOE-Structured Oral Examination.

Table I shows the gender distribution among the students. Out of 82 students, 70 participated. Among them, 37.1% (26) were male student, and 48.6% (34) were female student. 10 respondents did not mention their gender and mentioned as missing system.

Table-II shows the distribution of the respondents according to different aspects of revised curriculum. Regarding simplicity of the curriculum, 37.1% (26) agreed that the curriculum is easy to follow, 25.7% (18) neither agreed nor disagreed to the question. 7.1% (5) agreed strongly and 12.9% (9) disagreed.
Out of 70 students, 31.4% (22) agreed that the examination system is easy to follow. 24.3% (17) respondents neither agreed nor disagreed to the question. 21.4% (15) disagreed, Strongly disagreed 4.3% (3) & the same percentage strongly agreed.

Again, 40% (28) respondents agreed that the block posting in one subject at a time per rotation is effective for learning. 8.6% (6) respondents disagree neither agreed nor disagreed. 11.4% (8) strongly disagreed, 7.1% (5) strongly agreed & disagreed 18.6% (13).

Among the same respondents, 51.4% (36) agreed that block posting should contain all the major subjects simultaneously per rotation. Strongly agreed 14.3% (10), strongly disagreed 7.1% (5), same proportion disagreed & 4.3% (3) neither agreed nor disagreed.

Out of 70 students, 62.9% (44) respondents strongly agreed that the 6 hours learning period is tiring. 4.3% (3) respondents neither agreed nor disagreed to the question. 11.4% (8) agreed, 1.4% (1) disagreed and 5.7% (4) strongly disagreed to the question.

Regarding the break time, 20% (14) respondents strongly agreed that the 3-6 pm break will be better for learning eventually. 14.3% (10) strongly disagreed strongly. 18.6% (13) disagreed, 22.9% (16) agreed & 10% (7) respondents neither agreed nor disagreed to the question.

Table III shows the opinion of the students about various aspects of the examination system. 64.3% (45) students were in favour of giving MOCK test weekly, 17.1% (12) were in favour of twice a month and 4.3% (3), once a month.

Again, 55.7% (39) respondents were in favour of giving formative assessment test, 22.9% (16) in favour of summative test. 15 students did not make any comment on this.

Regarding adoption of unfair means in the examination, 64.3% (45) students did not do so, 4.3% (3) adopted, 30% (21) saw others to do and 48.6% (34) did not see any one to do so. 22 students did not give any comment on the former part & 15 in the following part of this question.

Out of 70 students, 72.9% (51) expressed that they did not get sufficient time for study themselves during block posting. 11.4% (8) student got time for study for their own. Table IV revealed the comfortableness with the examination, 42.9% (30) students are highly comfortable with MCQ, 25.6% (18) are comfortable, mildly comfortable 10% (7) & not comfortable are 7.1% (5).

About SAQ, 22.9% (16) are highly comfortable, 47.1% (33) are comfortable, 11.4% (8) are mildly comfortable and 4.3% (3) are not comfortable.

As with SEQ, 18.6% (13) are comfortable, 22.9% (16) mildly comfortable, 41.4% (29) not comfortable. 1.4% (1) did not comment on this.

Regarding OSPE, 37.1% (26) are comfortable, highly comfortable & mildly comfortable are 15.7% (11) & 21.4% (15) respectively, 8.6% (6) not comfortable 1.4% (1) did not give any opinion.

About SOE, 32.9% (23) are comfortable with it, same percentage is mildly comfortable, 5.7% (4) are highly comfortable, and 7.1% (5) do not know about this. 17.1% (12) did not give any opinion.

As with Clinical examinations, 35.7% (25) are comfortable with it, 18.6% (13) are highly comfortable, 22.9% (16) are mildly comfortable, not comfortable 5.7% (4) & did not know about it are 2.9% (2).

All parameters were statistically analyzed by T test by SPSS package system version 11.

Discussion:

Student’s evaluation of any teaching curriculum is a firmly recommended part of the teaching-learning process and is aimed at achieving the desired objectives. The concept of “adult learner” in the teaching-learning process further authenticates the utility of a feedback from students to evaluate teaching curriculum. However, it also has to be remembered that such an exercise is useful only if the student’s evaluation is analyzed and implemented to further overcome the shortcomings of teaching curriculum. The students overall, had a positive opinion regarding the newly implemented curriculum in MBBS. The recent change of the curriculum was done to make the knowledge more practically applicable for the benefit of the patient. Since the curriculum is new for both the teachers and the students, implementation of it was a little bit difficult. But the result of the study revealed the positive reception of most medical students to it. Likert scale grading was more than 3 in majority of the questions (Q.1 to 6). But there are some issues regarding the flaws of the system. According to the new syllabus, first professional examination will be held after eighteen months, second
professional after two years from the earlier professional examination and third professional will be held after eighteen months from the second professional examination. In the new system, every professional examination will be held two times in a year after six months. In this system, pass marks has been fixed at sixty per cent. So the failed student will fall behind for six months from his batch mates and he will be treated as an irregular candidate in the next examination. In this process, this is not clear where the unsuccessful student would be placed? The authorities have not yet decided which batch they would belong to. So this problem should be properly addressed, evaluated and solved. As the new curriculum is implicated from 1st year, the new batches do not face much problem to follow this. There are pros and cons of each system. In the field of medical education, new trends are emerging in teaching and learning as well as in assessment of students. More emphasis is now being placed on the learning outcomes and its integration with the curriculum. Students are now required to possess a breadth of skills - abilities, adaptabilities, problem solving talents, creativity and communication skills - all the necessary competencies to be a professional.

Conclusion:
The overall impact of the system is effective, practical and student friendly which have the potentiality of fulfilling the criteria to create a professional medical person. The findings have important implications for curriculum development and review regarding the implementation and conduct of strategies for reflection, and the impact on student learning. The development and delivery of an undergraduate medical curriculum is a far-reaching and complex system with many stakeholders. Of these stakeholders, no group better understands the intricacies or is better equipped to comment on the strengths and weaknesses of a program than its students. A study from the United Kingdom observed that when medical students were instructed on methods of providing feedback (through exercises of reflection and discussion), they were more confident in the feedback they were able to provide and could attribute it to this newly learned skill set. An important first step in soliciting meaningful and constructive feedback is “student empowerment”.

11. Students must be informed of the role that their feedback plays in changing the curriculum. It will be fair to say that many issues remain unresolved, but students’ opinion must not be ignored and the information that has been gathered here should contribute to the GMC’s consultations before any policy changes are implemented. 12. Problem-based learning (PBL) has been acknowledged as a method that enhances integration of learning, self-directed learning and provides relevance and context to the subject. It is also used to prepare students for professional life as physicians. The use of PBL has been reported from several medical colleges. To overcome some of the shortcomings of a purely PBL curriculum some schools in New Zealand, have used a hybrid system in their preclinical curriculum. The programme used newer educational methods within a conventional curriculum. So there should always be an option for a versatile method of assessment system in curriculum of medical education. Groups of faculty experts identified specific desired outcomes, referred to as “standards,” for each competency. A modified Delphi approach was used to engage these groups of experts to define the developmentally appropriate standards for each competency at the ends of year one and year two and at graduation (year five). Medical education has revolutionized through the years to reach perfection in curriculum making and assessment system. And student opinion plays a very important role in it.

Recommendations:
The overall system is very student friendly and practical. But there are some pitfalls which could be overcome very easily. Since the system is implemented for the best benefit of the students, learning hours and the break time can be rearranged specially during the block placements. Students should have some time of there own for preparing themselves for examinations. Another point can also be mentioned that they should cover the major subjects concurrently in the rotation during their block placements. Usually they are placed rotation wise in a single subject at a time in their block placement. Mostly the problem of such arrangement was that, by the time they complete their present placement they forget the learning from the previous one. At least 4 classes (3 recapitulation classes and 1 review class) of other subjects beside the main subject will help them to remember their learning. More assessments of the system will reveal the competency of it for the fulfilment of the criteria.
Acknowledgement:
My deepest gratitude and thankfulness are extended to all my students of HF-4, Holy Family Red Crescent Medical College for their help and cooperation. Also I thank Miss Rojina Akter Khanom, research manager, Insights and Ideas, Bangladesh, for her technical support in data processing and analysis.

References:
1. Boud D. and. Feletti G, London/Stirling (USA): Kogan Page Ltd, Taking Medical Education into the New Millennium: Implementing Problem-based Learning (PBL) in the Faculty of Medicine by the Dean & Members of PBL Committee Faculty of Medicine Jul 1999 Vol. 3 No. 2.
2. Rashida A, Naqvi Z & Wolfhagen I; Psychomotor Skills for the Undergraduate Medical Curriculum in a Developing Country—Pakistan 1 Aga Khan University, Karachi, Pakistan, and 2 Maastricht University, Maastricht, The Netherlands.
3. Siddiqui, Zarrin S; Study Approaches of Students in Pakistan: The Revised Two-factor Study Process Questionnaire Experience.
8. David C, Dorothy T, Elizabeth A, Undergraduate Medical Education Curriculum Renewal. Student Responsibility for the Curriculum. November, 2009; Dalhousi University, Faculty of medicine.
12. Kamran Z Khan, John W Sear, Downloaded from pmj.bmj.com on September 2, 2010 - Published by group.bmj.com.
Two-thirds of all women who develop breast cancer each year live in Asia. In many countries, including Bangladesh, there are few data on the pathological characteristics of breast tumours. The objectives of this study were a) to describe the estrogen receptor (ER), progesterone receptor (PR), and the expression of Her-2/neu oncogene expression status in a large series of breast cancers occurring in Bangladeshi women and b) to correlate these findings with the patients' age at diagnosis, tumour histological grade, and presence of axillary lymph node metastatic disease.

Method: One thousand forty two cases were evaluated in a referral practice. Tumour sections were stained immunohistochemically using Dako 1D5 (ER) and Dako 636 (PR) and semiquantitatively scored for ER and PR expression. Three hundred thirty five of these cases were also stained using Dako c-erb2 oncoprotein and scored for Her-2/neu over-expression.

Results: Estrogen Receptor expression was positive in 69.0%, PR expression was positive in 72.3%, and Her-2/neu was over-expressed (IHC score 3+) in 28.4% of the cases. Her-2/neu over-expression did not consistently correlate with ER and PR expression. ER and PR expression were inversely associated with tumour histological grade. Cases with axillary lymph node metastases had higher rates of ER and PR expression. No significant association was observed with patient's age.

Conclusion: Estrogen Receptor, PR, and Her-2/neu expression frequencies and prognostic factor associations in Bangladeshi women with breast cancer referred for tumour marker testing are very similar to those reported in Western countries. These findings have important implications for ensuring optimal testing capacity for all patients with these tumours, to allow for appropriate choices of treatment.
lymph node involvement in those patients with clinical stages I-III breast-operated disease.

**Materials and Methods:**
A retrospective study of one thousand forty two breast cancer specimens was done from patients of different districts of Bangladesh during the period of January 2003 to April 2008. These specimens were received originally as surgical specimens fixed in 10% formalin at Anwara Diagnostic Center (ADC) in Dhaka. The specimens received were mastectomies, lumpectomies, Trucut biopsies, wide local excisions or chest wall skin biopsies. These surgical specimens were then fixed in 10% neutral buffered formalin for 24 hours and then the tissue was processed for routine hematoxylin and eosin staining through the steps of dehydration, clearing, paraffin impregnation and finally sectioning and staining.

Sections were cut at 4 µm thickness, mounted onto salinized slides, and left to dry overnight at 37°C. Sections were then deparaffinized and rehydrated. Antigen retrieval was achieved by heat retrieval using a bench autoclave. Briefly, slides were placed in Coplin jars containing enough TrisEDTA (pH 9.0) to cover the sections, then autoclaved at 121°C for 15 minutes for both ER and PR. For Her-2/neu, the slides were placed in Coplin jars containing enough Citrate buffer (pH 6, Dako, Denmark) to cover the sections, and autoclaved at 121°C for 10 minutes. After washing, the sections were covered by applying Endogenous Enzyme Block for 10 minutes (3% hydrogen peroxide from Dako Denmark), the slides were then rinsed with Phosphate Buffer Solution (PBS). Slides were incubated with 100–200 µl of primary antibodies for 30 minutes at room temperature in a moisture chamber, then rinsed in PBS. The dilution of the primary antibodies against ER (Dako clone 1D5, Denmark) and PR (Dako, clone PgR636, Denmark) was 1:130, and for Her-2/neu (c-erb2oncoprotein, Dako, Denmark) was 1:50. Then the slides are incubated with Horse Redish Peroxidase (HRP) labelled polymer which is conjugated with secondary antibodies (Dako Label polymer). Finally, the sections were washed for four times in four minutes with changes of PBS, followed by adding 3,3 diaminobenzidine tetra hydrochloride (Dako) as a chromogen to produce the characteristic brown stain. The sections were then counterstained, dehydrated, and mounted for analysis. For each run of staining, a positive and negative control slide was also prepared. The positive control slides were prepared from breast carcinoma known to be positive for the antigen under study. The negative control slides were prepared from the same tissue block, but incubated with PBS instead of the primary antibody.

A semi-quantitative histochemical score was used to record results of ER and PR staining according to the system established by Allred et al. 4. This system considers both the pro-portion and intensity of stained cells. The intensity score (IS) ranges from 0 to 3, with 0 being no staining, 1 weak staining, 2 intermediate staining, and 3 intense staining. The proportion score (PS) estimates the proportion of positive tumour cells and ranges from 0 to 5, with 0 being non-reacting, 1 for 1% reacting tumour cells, 2 for 10%, 3 for one-third, 4 for two-thirds , and 5 if 100% of tumour cells show reactivity. The PS and IS are added to obtain a total score (TS) that ranges from 0 to 8. Tumour cells with a total score of 3 to 8 were considered positive, whereas those with TS less than 3 were considered negative cases.

Her-2/neu was scored on a 0 to 3 scale according to the criteria set by Dako. The staining was scored as: negative (0) when no membrane staining was observed, or when membranous staining was observed in less than 10% of the tumour cells; weak positive (1+) if weak focal membrane staining was seen in more than 10% of the tumour cells; intermediate (2+) if weak to moderate, complete membrane staining was seen in more than 10% of the tumour cells; and strongly positive (3+) if intense membrane staining with weak to moderate cytoplasmic reactivity was seen in more than 10% of the tumour cells. The procedure was standardized in comparison with Dako Hercep kit.

**Results:**
The study population consisted of One thousand forty two female patients with invasive breast cancer with tumour tissues. Patients’ mean age at diagnosis was 45.6 years. Infiltrating ductal carcinoma (IDC), not otherwise specified (NOS), accounted for 986 (94.6%) of cases. Twenty five patients were diagnosed with metastatic ductal carcinoma, 12 with infiltrating lobular carcinoma, nine with mucinous carcinoma, six with medullary carcinoma, two with metaplastic carcinoma,
one with tubular carcinoma, and another one with Paget’s disease. Nine hundred eighty-seven of the cases were graded histologically, 11 (1.1%) were well-differentiated (Grade I); 351 (35.6%) were moderately differentiated (Grade II), and 625 (63.3%) were poorly differentiated (Grade III).

### Table-I

<table>
<thead>
<tr>
<th>Histological marker</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR (n=1042)</td>
<td></td>
</tr>
<tr>
<td>ER+</td>
<td>719</td>
</tr>
<tr>
<td>PR+</td>
<td>753</td>
</tr>
<tr>
<td>ER+,PR+</td>
<td>698</td>
</tr>
<tr>
<td>ER+,PR-</td>
<td>21</td>
</tr>
<tr>
<td>ER-,PR+</td>
<td>55</td>
</tr>
<tr>
<td>ER-,PR-</td>
<td>268</td>
</tr>
<tr>
<td>Her-2 (n=335)</td>
<td>95</td>
</tr>
</tbody>
</table>

HR, hormone receptor; ER, estrogen receptor; PR, progesterone receptor; Her-2, Human epidermal growth factor receptor 2; +, positive; -, negative.

Estrogen Receptor, Progesterone Receptor, and Her-2/neu Oncogene Expression

MG Mostafa et al.

The estrogen and progesterone receptors and Her-2/neu expression status of the tumours is summarized in Table I. Of note, 69.0% (719/1042) of the specimens were ER positive, 72.3% (753/1042) were PR positive, and 28.4% (95/335) of the specimens tested for Her-2/neu were positive. A tumour was considered to be “positive” or to over-express Her-2/neu if it had an IHC score of 3+. There was a strong correlation seen between ER and PR status: when tumours were ER positive, 97.1% (698/719) were also PR positive; similarly, when tumours were ER negative, 83.0% (268/323) were simultaneously PR negative. Also, thirty tumours (9.0%) were “triple negative” for ER, PR and Her-2 over-expression.

A consistent relationship was not seen between Her-2/neu over-expression and HR status, likely because of a lack of statistical power. Overall, 22.7% (10/44) of ER negative cases showed Her-2/neu over-expression compared to 29.2% (85/291) of the ER positive cases; however, this positive relationship was not statistically significant (p=0.37, chi-square). On the other hand, statistical power was gained when ER status was stratified by IHC score, and an inverse relationship was then seen between Her-2/neu over-expression and HR status (Table II). As the ER IHC scores increased from two to seven, Her-2/neu over-expression continually decreased from 63.6% to 0%. In addition, when the data was divided into three groups based on low (0-2), medium (3-5) and high (6-8) ER IHC staining, statistical power was gained and a strong correlation was seen. Forty (40.3%) percent of those specimens that had an IHC score of 0 to 2 over-expressed Her-2/neu, 26.1% of those with a score between 3 to 5 were her-2/neu positive, and only 22.0% of those with a score between 6 to 8 were Her-2/neu positive (correlation r=-0.95).

This inverse correlation can also be seen by looking at the ER IHC score distribution of Her-2/neu + and Her-2/neu - cases. A greater percentage of the Her+ cases are distributed amongst the lower ER IHC scores compared to the Her- cases, where a greater percentage of the Her- cases is distributed amongst the higher ER IHC scores. For example, 32.6% of Her-2/neu + cases had an ER IHC score of 0 to 2, and only 18.9% of the Her-2+ cases had a score between 6-8. Conversely, only 5.0% of Her-2/neu - cases had an IHC score of two, while 26.7% of the Her-2- cases had an IHC score in the range of 6-8.

Biological tumour marker expression was not correlated with patient age at diagnosis (Table-III). Similarly, age was not significantly correlated with tumour grade or axillary lymph node status.

No significant associations were seen among tumour histological grade and dichotomous hormonal receptor or Her-2/neu expression status (Table-IV). Significant differences were seen however when the IHC scores of the histological grades were investigated. Table-V shows these trends. With greater histological differentiation, tumours had higher ER IHC scores. For example, a much higher percentage of Grade I tumours had ER IHC scores in the 5-8 range (72.7%), meaning strongly positive, than did the Grade II (47.9%) or Grade III tumours (40.8%) (p=0.015, chi-square). The same could be seen with PR expression: 72.7% of Grade I, 52.7% of Grade II, and 45.9% of Grade III had IHC scores of 5-8 (p=0.035, chi-square).

Cases with axillary lymph node metastases had a slightly higher Her-2/neu over-expression (29.5%) (31/105) than those without (27.8%) (64/230) (p=0.75, chi-square).
There was a statistically significant difference in ER expression between the cases that had lymph node involvement (85.4%) (205/240) and those that did not (64.1%) (514/802) (p<0.001, chi-square). A similar association was seen with PR expression: 86.7% (208/240) of the cases with lymph node involvement were positive, while 68.0% (545/802) of the cases without lymph node involvement were PR+ (p<0.001, chi-square).

Table-II

<table>
<thead>
<tr>
<th>IHC Score</th>
<th>Her-2+ [n=95]</th>
<th>Her-2- [n=240]</th>
<th>Her-2 Overexpression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. (%)</td>
<td>No. (%)</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>10 (10.5)</td>
<td>34 (14.2)</td>
<td>10/44 22.7%</td>
</tr>
<tr>
<td>2</td>
<td>21 (22.1)</td>
<td>12 (5.0)</td>
<td>21/33 63.6%</td>
</tr>
<tr>
<td>3</td>
<td>3 (3.2)</td>
<td>7 (2.9)</td>
<td>3/10 30.0%</td>
</tr>
<tr>
<td>4</td>
<td>20 (21.1)</td>
<td>54 (22.5)</td>
<td>20/74 27.0%</td>
</tr>
<tr>
<td>5</td>
<td>23 (24.2)</td>
<td>69 (28.8)</td>
<td>23/92 25.0%</td>
</tr>
<tr>
<td>6</td>
<td>8 (8.4)</td>
<td>38 (15.8)</td>
<td>8/46 17.4%</td>
</tr>
<tr>
<td>7</td>
<td>0 (0.0)</td>
<td>2 (0.8)</td>
<td>0/2 0%</td>
</tr>
<tr>
<td>8</td>
<td>10 (10.5)</td>
<td>24 (10.0)</td>
<td>10/34 29.4%</td>
</tr>
<tr>
<td>0 (ER-)</td>
<td>10 (10.5)</td>
<td>34 (14.2)</td>
<td>10/44 22.7%</td>
</tr>
<tr>
<td>2-8 (ER+)</td>
<td>85 (89.5)</td>
<td>206 (85.8)</td>
<td>85/291 29.2%</td>
</tr>
</tbody>
</table>

Table-III

<table>
<thead>
<tr>
<th>Biological tumour marker expression by Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;50 yrs old</td>
</tr>
<tr>
<td>ER+</td>
</tr>
<tr>
<td>PR+</td>
</tr>
<tr>
<td>Her-2+</td>
</tr>
</tbody>
</table>

Table-IV

<table>
<thead>
<tr>
<th>ER, PR, and Her-2/neu expression by Histological Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade I (%)</td>
</tr>
<tr>
<td>ER</td>
</tr>
<tr>
<td>ER+</td>
</tr>
<tr>
<td>PR</td>
</tr>
<tr>
<td>PR+</td>
</tr>
<tr>
<td>Her-2</td>
</tr>
<tr>
<td>Her+</td>
</tr>
</tbody>
</table>
Discussion:
The case series reported here is not population-based, but rather composed of referred cases for which hormonal receptors and Her-2/neu marker tests were requested by the physicians obtaining the tissues, and for which the patients were able to pay. Thus this is a selected case series. The degrees of difference in results from those obtainable from a population-based series are unknown. Most reports on hormonal receptor and Her-2/neu oncogene expression are similarly of selected case series, and on few occasions when population based series have been reported, surprisingly, the frequencies of these markers have been remarkably similar to those found in the same geographic populations.

In these contexts the most important results of the current study are those suggesting that the frequencies of ER, PR and Her-2/neu expression in tumours from Bangladeshi women with invasive breast cancer are very similar to those found in high income country population and most importantly, for ER and PR status, more than two third of all patients had tumours that were positive for ER, PR or both markers. While higher histological tumour grade was associated with lower hormonal receptor Allred scores, approximately 40% of grade III tumours were ER or PR moderately or strongly positive. Thus higher histological grade is a poor predictor of hormone receptor status.

The patients in this series are younger than those reported in most series from high income countries; it most likely reflects the sizes of the different age populations in Bangladesh from which these cases come. Younger patients are more likely to have higher grade tumours, as is observed in this series. Younger age also appears to be an independent adverse prognostic risk factor. The observation that cases with axillary nodal metastases were more frequently hormonal receptor positive, more likely reflects case selection than expression of biological natural history. Patients with hormonal receptor negative tumours have biologically and temporally more aggressive disease and, in the difficult economic and health system circumstances of most patients in Bangladesh, may be less likely to have tissue samples studied. Finally, in this study the previously noted inverse relationship between positive Her-2/neu over-expression and positive hormonal receptor status were also observed.

Diaz, Uy and other authors have emphasized the importance of tissue management prior to laboratory testing, which issues will be explored from this series in a future communication. Here it is emphasized that efforts to place specimens in buffered fixatives within 30 minutes of surgical removal, and fixation for at least eight hours are critical factors in assuring likelihood of discovery of present hormonal receptor proteins, and preventing their destruction and non-detection.
Because the presence of hormonal receptor proteins in tumours strongly predicts for response to hormonal therapies, which are less costly and toxic than systemic chemotherapies, the general observation that these proteins are present in more than 2/3rd of cases in Bangladeshi women, and that specific testing in individual cases can be successfully accomplished in Bangladesh are important issues for patients and their physicians. The possibility of offering hormonal treatment to all patients with breast cancer in Bangladesh must now strongly be considered. Similarly, with respect to Her-2/neu testing, available data strongly suggest that only Her-2/neu positive tumour-bearing patients benefit from anthracycline chemotherapies, and thus this testing can potentially save two third of patients, for whom chemotherapy is under consideration, from the expense, gastro-intestinal, haematopoetic and cardiac toxicities of anthracycline treatments. In summary, frequency of hormonal receptor positive and Her-2/neu over-expressing tumours in Bangladeshi women with invasive breast cancer to be similar to those found in patients from high income countries.

Limitation:
Each breast specimen had taken different times to reach our laboratory as they had come from different parts of the country by different means. They were immersed in 10% formalin immediately after operation and kept in it while transportation. Then they were immediately re-fixed in 10% buffered neutral formalin (BNF) solution on receipt at our laboratory. So, in some cases, (where the specimens had travelled long ways from remote areas) complete tissue fixation may have occurred already when we received them, causing uneven fixation of the specimens, although the number is negligible. However, it may have minor influence on our testing accuracy.

References:
Summary:
Objective: Fetal femur length is an important parameter for determining gestational age. If we use tables based on Bangladeshi population, gestational age estimation will be more accurate. This study was therefore designed to determine the gestational age by fetal femur length measurement in our country.

Methods: Healthy gravid patients with optimal dates were included in a prospective study. Fetal femur length along with other parameters was measured. A table and a graph were prepared by Polynomial regression model. Previously established nomograms were compared with it.

Results: The gestational age predicted from the femur length measurements of 1223 subjects from 13 to 40 weeks are presented here in a tabulated form. Percentiles, mean and standard deviations were also derived. The quadratic model showed a good fit to the data. There was a gradual increase of the femur length measurements. From 13 to 27 weeks gestation, there was no clinically important difference between this and western nomograms for predicting gestational age but after 32 weeks the difference with western nomograms became significant.

Conclusion: This nomogram is special for Bangladeshi population. It will give more accurate gestational age assessment than the western tables that are still followed in our country, especially in the 3rd trimester.

Key Words: Gestational age, femur length, Bangladesh.
and has clear-cut ends. After 32 menstrual weeks the distal femoral epiphysis is visible but not included in the measurement.

Body mass index (BMI) was used to determine the nutritional status. 18.5 was taken as the cutoff value. SPSS was used for data entry and analysis in the computer. Polynomial regression model was fitted to the data.

Results:
The demographic characteristics of the study population of 1223 subjects were as follows. Mean maternal age was 26.95 ± 4.49 (1SD) with a range of 17 to 40 years. It was predominantly a middle class population. 96.9% were from middle class, 0.8% belonged to lower class and 2.3% were from upper class.

93.6% were from urban and 6.4% from rural areas. 54.7% were primipara and 45.3% were multipara. Mean parity was 0.6 (±0.78). Mean BMI was found to be 23.67 (±3.4).

The coefficient of multiple correlation, R² = 0.975. The quadratic model gave a good fit to the data. Graph 1 shows raw data of fetal femur length with fitted 3rd, 10th, 50th, 90th and 97th percentiles.

In Table 1, 10mm predicts 13.2 (±0.75) (2SD) weeks, 45mm predicts 25 (±2.08) weeks, 68mm predicts 36.1 (±2.95) weeks and 74mm predicts 40 (±3.14) weeks.

Table-I

<table>
<thead>
<tr>
<th>Weeks of gestation for FL R²=0.975</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL (mm)</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>13</td>
</tr>
<tr>
<td>14</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>16</td>
</tr>
<tr>
<td>17</td>
</tr>
<tr>
<td>18</td>
</tr>
<tr>
<td>19</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>21</td>
</tr>
<tr>
<td>22</td>
</tr>
<tr>
<td>23</td>
</tr>
<tr>
<td>24</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>26</td>
</tr>
<tr>
<td>27</td>
</tr>
<tr>
<td>28</td>
</tr>
<tr>
<td>29</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>31</td>
</tr>
<tr>
<td>32</td>
</tr>
<tr>
<td>33</td>
</tr>
<tr>
<td>34</td>
</tr>
<tr>
<td>35</td>
</tr>
<tr>
<td>36</td>
</tr>
<tr>
<td>37</td>
</tr>
<tr>
<td>38</td>
</tr>
<tr>
<td>39</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>41</td>
</tr>
<tr>
<td>42</td>
</tr>
<tr>
<td>43</td>
</tr>
<tr>
<td>44</td>
</tr>
<tr>
<td>45</td>
</tr>
<tr>
<td>46</td>
</tr>
<tr>
<td>47</td>
</tr>
<tr>
<td>48</td>
</tr>
<tr>
<td>49</td>
</tr>
</tbody>
</table>

Fig.-1: Raw data of fetal Femur length with fitted 3rd, 10th, 50th, 90th and 97th centiles.
Discussion:
Estimation of gestational age accurately is one of the most important functions of diagnostic ultrasound. Of all the parameters used to determine gestational age, femur length has been proved to be one of the most accurate, by different studies.\(^1\)\(^2\) Determination of gestational age by ultrasound has now become an integral part of maternal antenatal care. Since up to 50% of mothers who claim to know with certainty are in fact more than two weeks in error when gestational age is calculated with ultrasound. A discrepancy of 2 weeks can be critical for the survival of an infant who has to be delivered early because of some antenatal complication.\(^4\)

In this study femur length was measured from 13 to 40 weeks gestational age. It was found to increase gradually with gestational age. After regression analysis of the raw data the table to predict the gestational age from femur length measurement, was prepared. The high value of coefficient of multiple correlations shows a good relation between the two variables. The polynomial regression quadratic model showed a good fit to the data. The graph shows that there was increased dispersion of data and the fitted curves as the gestational age increased.

Previous studies on Bangladeshi population had determined that our fetal measurements were smaller than the western ones.\(^5\)\(^-\)\(^11\) In this study 10 mm predicted 13 week (2SD, ±1w) and 74 mm predicted 40 weeks (±3w). Whereas in another Bangladeshi study at 16w, femur length was 19mm (±2.6mm) (1SD) and at 40 week it was 72mm (±3.2mm).\(^10\)

In an Indian study, at 13 week gestational age femur length was 11mm and at 40 week it was 76mm.\(^12\)

In Western studies, 10mm predicted 13 week (±7d) (2SD) and 75mm predicted 40 week (±23d), \(^13\) 10mm predicted 13 week (±10d) (2SD) and 78mm predicted 40 week (±22d) \(^14\) and in an early study 18mm indicated 15w (±6d) (2SD) and 75mm indicated 40 week (±22d).\(^15\)

All studies showed that in the early 2nd trimester Bangladeshi, Indian and Western measurements were similar but as pregnancy progressed there was discrepancy between different races. The observed values of femur length measurement of other Bangladeshi studies were similar to this one. Indian and western were little bigger than Bangladeshi values.

LIMITATION: The study population was predominantly of middle class as poor patients mostly deliver at home. Even when they go to doctors most of them are unable to recall their LMP accurately, which was necessary for this study.

Conclusion:
In 1223 subjects, from 13 to 27 weeks gestation, there was no clinically important difference between this and western nomograms but after 32 weeks the difference with western nomograms became significant. This nomogram is therefore special for Bangladeshi population and can be useful for accurate dating of pregnancies specially in the third trimester, as there was a difference of 2-3 weeks at term between this and different western charts.

Recommendation: More such studies can be done on other fetal parameters to prepare Bangladeshi charts.
References:


15. Campbell S and group. At Harris Birthright Center, King’s College Hospital. 1977.
The Role of Mirena (Intra-uterine progestogens), Other than Contraceptive benefits: Current Concepts and Practices

I BINA

Introduction:
Mirena is a long acting intrauterine hormone-releasing (LNG-IUS) contraceptive system. It comprises a small flexible plastic T-shaped frame (length: 3 mm) bearing a levonorgestrel(LNG)- containing cylinder. After insertion into the uterus, levonorgestrel-Intrauterine system (LNG IUS) released from the cylinder in small doses (initial release rate, 20 mg/day) into the uterine cavity.

First of all, the concept of intra-uterine administration of progesterone for contraception was introduced in the US in the 1970s. Then, the levonorgestrel-releasing intra-uterine system was devised in Finland gaining a license there for contraception in 1990 and is currently marketed in most European countries, in the UK, since May 1995 and in the US since 2000. It is now widely used for its excellent contraceptive benefits. Then the non-contraceptive health benefits of these systems secondary to the effect of the local action of the progestogen on the endometrium have been observed and researched which has supported the granting of a license for the use of the levonorgestrel-releasing system for the non-contraceptive indication of menorrhagia, specially idiopathic menorrhagia and the treatment of other endometrial pathology.

Keywords: Mirena /Intrauterine progestogens/ Noncontraceptive/ LNG-IUS

polymethylsiloxane. The membrane (also made of polymethylsiloxane) allows a controlled release of 20 mcg of levonorgestrel daily at a constant rate over 5 years. The rate slowly decreases to 15 mcg a day after 5 years and then to 12 mcg at 7 years. Both the serum and intra-uterine levels remain constant over the lifetime of the device in one individual. The serum levels vary from 0.3 to 0.6mmol/l.

**Effects on Endometrium.**
The high levonorgestrel (LNG) concentration in the endometrium down regulate endometrial oestrogen and progesterone receptors, making the endometrium insensitive to circulating E2 (thereby suppressing endometrial growth). After only a couple of months of Mirena use, the glands of endometrium atrophy, the stroma becomes swollen and decidual, the mucosa thins and the epithelium becomes inactive. Vascular changes are thickening of arterial walls, suppression of spiral arterioles and capillary thrombosis. The endometrial changes are uniform within 3 cycles after insertion of the system and no further histological changes take over the long term. Biochemical modulators shows a reduction of cell proliferation and an increase in programmed cell death. These result in a reduction in the endometrial thickness. These changes are reversible and after long-term use; normal menstruation is restored 1 month after the removal of the system.

The main principle of non-contraceptive health benefits of the LNG-IUS is based on this endometrial suppression and these include beneficial effects on menorrhagia, as the progestogenic component of combined HRT, in the treatment of hyperplastic and endometrotic endometrium and fibroids and their symptoms. Other health benefits include a reduction in pelvic inflammatory disease and ectopic pregnancy and a possible application in the treatment of premenstrual syndromes.

**Effects on ovarian function.**
Over 85% of women have ovulatory cycles using the LNG-IUS, and thereafter most cycles are ovulatory. For complete suppression of ovulation, a daily intrauterine release of more than 50mcg of LNG is required.

**Benefits**

*Role in the management of menorrhagia.*
Menorrhagia is experienced by up to 30% women of reproductive age, it accounts for 60% of general practice consultations for menstrual dysfunction, 12% of gynecology referrals and is the commonest cause of iron-deficiency anaemia affecting 20-25% of healthy fertile women in the UK.

One in 20 women aged 30-49 years consult their general practitioner each year with menorrhagia. Of women referred secondary care, 60% are likely to have a hysterectomy within 5 years of referral as shown by Coulter et al. and in most of these women have a normal uterus removed.

In 1993-1994, 73,517 hysterectomies were carried out in England, there was a decline in 1997-1998 when 63,345 operations were carried out. Endometrial ablations had risen markedly from 9945 to 36,440 in the same period.

To date, the management of menorrhagia has relied on pharmacological or surgical therapy. Current pharmaceutical options include non-steroidal anti-inflammatory drugs (NSAIDs), antifibrinolytics, danazol, Progestogens and combined oral contraceptives. The surgical treatments include hysterectomy and endometrial ablation or resection.

**A. Medical therapies for Menorrhagia**
The LNG-IUS is more effective than oral treatment in the management of menorrhagia. Milsom et al. studied that Mirena is superior to tranexamic acid and flurbiprofen in reducing blood loss (see Figure-1) on menorrhagia with a lesser side-effects.

Several studies by various types of drugs showed the reduction of menstrual blood loss by mefenamic acid 25%, Combined oral contraceptive pill 40%, tranexamic acid 50%, GnRh analogues 75% and danazol 80%.

![Fig.-1: Reduction in menstrual blood loss as a percentage of mean of two control cycles for Mirena*, Tranexamic acid (TA) and flurbiprofen (FLURB); *p<0.05 (between TA and FLURB); **P<0.001 (between Mirena* and TA/FLURB).](image-url)
The study of 20 women with menorrhagia by Andersson and Rubo\textsuperscript{11} used the LNG-IUS and demonstrated a significant reduction in menstrual loss of 85\% at 3 months\textsuperscript{*} and 97\% at 12 months of LNG-IUS usage with significant increase in mean serum ferritin by 47\% in the first year of use. (See Table-I, Fig-2 & Fig-3).

Irvine et al.\textsuperscript{7} showed that Mirena reduced MBL by 94\% after 3 months of treatment (see Table-I), compared with 87\% with oral norethisterone (15 mg daily for 21 days in each cycle). More recently, Reid and Virtanen-Kari\textsuperscript{12} showed that reduction of MBL after 6 months with Mirena was 96\% compared with mefenamic acid was only 17\%.

Tang GE,\textsuperscript{13} et al. involved 10 Chinese women with anaemia and who had objectively measured blood loss of > 80 ml, used the LNG IUS and demonstrated a reduction of MBL 54\% at one month, 87\% at 3 month and 95\% at 6 month of treatment and an increase in mean haemoglobin by 19.2\% at 6 months compared with pre-treatment cycles. In addition, Xio et al.\textsuperscript{14} showed that Mirena significantly reduced MBL and increased hemoglobin and ferritin levels over 3 years follow up.

\begin{table}[h]
\centering
\caption{Summary of comparative and non-comparative studies evaluating the effectiveness of Mirena in the treatment of menorrhagia.}
\label{table:menorrhagia}
\begin{tabular}{|l|c|c|c|c|c|}
\hline
Study & Duration (months) & Mean menstrual blood loss (ml) & Reduction in menstrual blood loss (%) & Significance \\
& & Pre-treatment & After treatment & & \\
\hline
Scholten\textsuperscript{4} & 12-Jul & 119 & 17 & -86 & *** \\
Andersson & Rybo\textsuperscript{11} & 3 & 176 & 24 & -86 & **** \\
 & & 6 & 176 & 15 & -91 & **** \\
 & & 12 & 176 & 5 & -97 & **** \\
Milsaon et al.\textsuperscript{9} & 3 & 203 & 34 & -82 & **** \\
 & & 6 & 25 & -88 & **** \\
 & & 12 & 9 & -96 & **** \\
Tang & Lo\textsuperscript{13} & 1 & 183 & 84 & -54 & *** \\
 & & 3 & 183 & 24 & -87 & * \\
 & & 6 & 183 & 10 & -95 & *** \\
Xiao et al.\textsuperscript{14} & 6 & 124 & 23 & -81 & **** \\
 & & 12 & 124 & 26 & -79 & **** \\
 & & 24 & 124 & 3 & -98 & **** \\
 & & 54 & 124 & 14 & -89 & **** \\
Reid & Virtanen-Kari\textsuperscript{12} & 3 & 122 & 12 & -90 & *** \\
 & & 6 & 122 & 5 & -96 & *** \\
Irvine et al.\textsuperscript{7} & 1 & 105 & 16 & -85 & **** \\
 & & 3 & 105 & 6 & -94 & **** \\
\hline
\end{tabular}
\end{table}

* Median values.
* p<0.05; **p<0.01; ***p<0.005; ****p<0.001.
Stewart et al. and Scholten has also showed the same result in their study: MBL reduced by 86% (see Table I) with increase of Hb% and serum ferritin level (see Figure-2 & Figure-3). The results of the meta-analysis showed the use of the LNG IUS could significantly reduce menstrual blood loss (range, 74-97%) in women with confirmed menorrhagia. However, to establish the effectiveness and cost effectiveness relative to other treatments and effect on surgical waiting lists, larger, more powerful, randomised, controlled trials with longer follow-up are required.

The Royal College of Obstetricians and Gynaecologists (RCOG) guideline on the management of menorrhagia in primary care does not identify the LNG-IUS as a treatment option. However, the RCOG guideline on the management of menorrhagia in secondary care suggests the LNG-IUS may be used to treat menorrhagia after an assessment of the uterine cavity and endometrial biopsy where appropriate. FFPRHC Guidance (April 2004) in The LNG-IUS in contraception and reproductive health stated “The LNG-IUS is effective option to treat menorrhagia (Grade A).”

**Fig.-2:** Reduction in menstrual blood loss (MBL) in women with menorrhagia after 3, 6 and 12 months of Mirena* use; *p<0.001 vs baseline.

**Fig.-3:** Mean concentrations (+SD) of a) hemoglobin and b) serum ferritin in women with menorrhagia before Mirena* insertion and after 3, 6 and 12 months of use (hemoglobin) and 6 and 12 months of use (ferritin); **p<0.01, ***p<0.001.
B. Surgical management for menorrhagia

A Cochrane review\textsuperscript{17}, which included five studies, compared to the LNG-IUS with surgery (hysterectomy, endometrial resection and ablation) and concluded that conservative surgery appeared to be significantly more effective in controlling bleeding at 12 months [odds ratio (OR) 3.99; 95% CI 1.53–10.38] with beneficial effect in improving quality of life as conservative surgery, in the long term. Reports suggest that the treatment was so effective that 64-82% of women need not to do hysterectomy and around 14% of women continue existing medical therapies.

Nagrani and Bowen-Simpkins\textsuperscript{18} showed recently in one study of 4-5-year long-term follow-up of the patients 62 continuation rate of 50% after a mean 54 months follow-up and only 26.4% eventually had surgical treatment and an overall 67.4% avoided surgery.

When MBL is measured using a pictorial assessment chart (PBAC) by Higham et al,\textsuperscript{19} treatment success, defined as a PBAC score of d” 75 at 12 months, has been shown in similar comparisons. In the Visual Analogue Scale (VAS) assessment of the subjective symptoms, sleeping problems were slightly increased in the TCRE group, general feeling of genital health was increased and menstrual pain decreased over time in both the groups.

In a randomized trial by Hurskainen et al.\textsuperscript{20} on quality of life and cost effectiveness of the LNG-IUS (n=119) versus hysterectomy(n=117), for treatment of menorrhagia total cost were 3 folds lower with Mirena than hysterectomy.\textsuperscript{31} Health-related quality of life(HRQoL) and indices of psychosocial well-being improved significantly in both group. Overall Mirena provides effective option for the treatment of menorrhagia with avoidance of the risk associated with a surgical procedure, and without permanent loss of fertility.

The RCOG guideline on management in secondary care\textsuperscript{16} outlines “A progestogen releasing IUD is an effective treatment for reducing heavy menstrual blood loss and should be considered as an alternative to surgical treatment (A).”

FFPRHC Guidance\textsuperscript{1} (April 2004) in the LNG-IUS in contraception and reproductive health stated:

1. “Surgery (hysterectomy, endometrial resection or ablation) is more effective than the LNG-IUS in treating menorrhagia at 1 year (Grade A).”

2. “The LNG-IUS is as effective as conservative surgery (resection and ablation) in the management of menorrhagia after the first year (Grade A).”

3. “Patient satisfaction and quality of life appear similar following LNG-IUS or surgical treatment of menorrhagia (Grade A).”

So the LNG-IUS provides an effective, efficient, well-tolerated, cost-effective alternative to other medical and surgical management of menorrhagia.

Progestogenic component of HRT & Effects on Lipid metabolism

Hormone replacement therapy (HRT), oestrogen (ERT), is an acceptable option for women who require relief of vasomotor symptoms. Exposure to unopposed oestrogens increases the risk of endometrial hyperplasia and malignancy. Progestogens reduce this risk. Randomized trials suggest that the LNG-IUS is effective in providing endometrial protection from the stimulatory effects of oestrogen, oral\textsuperscript{21} or transdermal. Cohort studies provide evidence of endometrial protection with the LNG-IUS and percutaneous oestradiol\textsuperscript{22} gel use. The majority of postmenopausal women (98.2%) using an LNG-IUS as the progestogenic component of HRT were amenorrhoeic after 12 months of use.\textsuperscript{21}

Mirena causes favourable effects on ERT on the plasma lipid and lipoprotein profiles. A recent study by Raudaskoski et al.\textsuperscript{23} using 2 mg oestradiol valerate and the Mirena intra-uterine system showed HDL-cholesterol remaining at baseline level after 12 months of treatment. The LDL-cholesterol levels were reduced by all the LNG-IUS.\textsuperscript{23} These changes might be favorable in cardioprotection.

LNG IUS and endometrosis

A prospective, non-comparative study showed that of women with the LNG-IUS reported 80% reduction in primary dysmenorrhea and MBL.\textsuperscript{24} According to the visual chart devised by Higham et al.\textsuperscript{19}, women with endometriosis have a higher baseline mean menstrual score than normal. A pilot study\textsuperscript{25} demonstrated a greatly reduced visual analogue scale for menstrual pain which was associated with a 76% mean reduction in PBLA chart score.

Fibroids

The intra-uterine Levonorgestrel systems provide an improvement in fibroid-related menorrhagia with a
reduction in dysmenorrhoea. Five observational studies were identified that investigated the effect of LNG-IUS on uterine fibroids which showed a reduction in MBL and fibroid volume with LNG-IUS use.

FFPRHC Guidance (April 2004) in The LNG-IUS in contraception and reproductive health stated “The LNG-IUS is effective in the management of menorrhagia, even in the presence of fibroids (Grade C).” “It is not generally recommended that the LNG-IUS be used if fibroids are distorting the uterine cavity (Grade C).” WHOMEC recommends that if the uterine cavity is distorted with fibroids, the risks of LNG-IUS use outweigh the benefits (WHO 4) because this may not be compatible with insertion.

Endometrial hyperplasia & Treatment of early endometrial cancer

The LNG-IUS is effective in the treatment of endometrial hyperplasia due to the antiproliferative and suppressive effects on the endometrium. The largest case report found that all 12 women with simple hyperplasia or atypical hyperplasia had normal endometrium 12 months after LNG-IUS insertion. Montz et al. showed that intra-uterine progesterone appears to eradicate some cases of presumed stage I grade 1 endometrial cancer in women with a high risk of peri-operative morbidity.

Pelvic inflammatory disease

A large randomised study in 5 European countries concluded that women using the LNG IUS had a significantly lower rate of PID than IUCD users. There is also a protective effect in the long term, preventing sexually transmitted infection developing into PID with no protection against sexually transmitted infection.

Prevention of ectopic pregnancy

The LNG-IUS have a very low failure rates in prevention of pregnancy which makes the ectopic pregnancy rate very low. WHOMEC recommends that women with a previous ectopic pregnancy may use the LNG-IUS (WHO Category 1: unrestricted use).

Risks

Ovarian cyst formation

The incidence of functional ovarian cysts was higher in the LNG-IUS group compared to IUCD users 1.2 versus 0.4 per 100 women-years. The majority of cysts (94%) were asymptomatic, relatively small and resolved spontaneously. Occurrence was not related to bleeding pattern, age or FSH levels.

Progestogenic side effects & Unscheduled vaginal bleeding

Some women do complain of hormonal side effects like oedema, weight gain, headache, breast tenderness, acne and hirsutism and decrease in LDL level. The multicentre contraceptive study in Europe noticed no difference in the weight gain between LNG IUS users and copper IUD users. Irregular vaginal bleeding and spotting in the first few months after insertion is a great problem with LNG-IUS. This usually settles within 3-6 months, in which time the full endometrial transformation occurs. 35% of premenopausal women develop amenorrhoea at the end of the first year of use, and normal menstruation will return once the device is removed.

Conclusions:

The LNG IUS shows a wider spectrum of benefit other than contraception. Careful pre-insertion counseling; and insertion by a trained fitter can minimize the side effects and bothersome symptoms.

The Mirena is a useful tool in the treatment of menorrhagia and progestogenic component of the hormone replacement armory mainly due to the local effect of Levonorgestrel in the endometrium which may lead to the development of the treatment of other endometrial diseases.

References:

The Role of Mirena (Intra-uterine progestogens), Other than Contraceptive benefits

I Bina


Evaluation & Management of Obscure Gastrointestinal Bleeding (OGIB)
S PERVEENa, MR HOSSAINb, SMB HUSSAINc, MA AHMEDd, H AFTABe

Summary:
Gastrointestinal bleeding is a common entity. Incidence of bleeding has comparatively increased though case fatality is static. Despite improved treatments and better understanding of the underlying pathophysiology of peptic ulcer disease the rising figures of GI bleeding reflect an increasing proportion of elderly population and non-steroidal anti-inflammatory use. Overall, 5% of all cases of gastrointestinal bleeding fall under the category of Obscure gastrointestinal bleeding (OGIB) in the USA. Obscure gastrointestinal bleeding is defined as bleeding of unknown origin that persists or recurs after an initial negative endoscopic evaluation including colonoscopy and/or upper endoscopy. OGIB can be either Occult (no visible blood) or Overt (Passage of visible blood).

Less common aetiologies of GI bleeding e.g. Cameron erosions, Dieulafoy’s lesion, Watermelon stomach that are sometimes difficult to identify at endoscopy often present as OGIB. They need special techniques even thrombolytic therapy to precipitate bleeding for diagnostic angiography. Increased awareness of the existence of such conditions help in rapid and accurate identification of the lesion. Review of such cases will be the focus of this publication.

Evaluation & Management of Obscure Gastrointestinal Bleeding (OGIB)
S PERVEENa, MR HOSSAINb, SMB HUSSAINc, MA AHMEDd, H AFTABe

Introduction:
Bleeding from the upper gastrointestinal (GI) tract remains common, with a reported annual incidence of up to 172 per 1000001, which has increased. Case fatality was recently reported as 14%2 which is static, despite improved treatments and better understanding of the underlying pathophysiology of peptic ulcer disease. The rising figures may reflect an increasing proportion of elderly patients and non-steroidal anti-inflammatory use. Of patients in whom a diagnosis is confirmed, more than 90% suffer from peptic ulcers, oesophageal or gastric malignancy, varices, Mallory–Weiss syndrome, erosive disease and oesophagitis1,2. Less common aetiologies of upper GI bleeding which are sometimes difficult to identify at endoscopy and manage will be the focus of this study.

Definition
Obscure gastrointestinal bleeding (OGIB) is defined as bleeding of unknown origin that persists or recurs after an initial negative endoscopic evaluation including colonoscopy and/or upper endoscopy (esophagastroduodenoscopy [EGD]).3 OGIB can be classified as either:

(1) Occult OGIB- which is manifested by recurrent iron deficiency anemia and/or recurrent positive fecal occult blood test (FOBT) results
(2) Overt OGIB- which is manifested as melena or hematochezia.

Overall, OGIB accounts for 5% of all cases of gastrointestinal bleeding in the USA4. Angiectasias of the small bowel are the most common source of OGIB and account for 30% to 40% of gastrointestinal bleeding in the elderly population, whereas tumors such as leiomyomas, carcinoids, lymphomas and adenocarcinomas are the predominant cause in patients aged 30 to 50 years5. Meckel’s diverticulum, erosions and ulcers from nonsteroidal anti-inflammatory drug (NSAID) use6 and Crohn’s disease of small bowel are also potential causes of OGIB. The term ‘mid-gastrointestinal bleeding’ rather than obscure bleeding is now applied if the origin is thought to be between papilla and ileocaecal valve7.

Causes of Obscure GI Blood Loss:
Common causes (any site):
Peptic ulcer, Reflux esophagitis, Erosive gastritis, Carcinoma(Specially colon), Vascular ecstasia / angiodysplasia, Chron’s disease
Uncommon Causes (Upper GIT)
1. Esophagus / Stomach
   - Dieulafoy’s lesion, Cameron’s erosions with hiatal hernia, Prolapse erosions,
   - Gastric antral vascular ecstasia (Water melon stomach), Portal gastropathy, Varices
2. Small Intestine
   - Meckel’s diverticulum, Celiac sprue, Chron’s disease, Duodenitis

Uncommon Causes (Lower GIT)
3. Colon
   - Diverticula (obscure overt bleeding), Colitis (ulcerative/ ischaemic/ radiation injury), Endometriosis, Infection (hookworm, ascariasis, whipworm, strongiloidosis, amoebiasis, cytomegalovirus, tubercular enterico colitis)
4. Rectum
   - Fissure, Haemorrhoid
5. Any site
   - Vasculitis, Telangiectasia, Aorto enteric fistula, Other cancers (lymphoma-gastric NHL, Kaposi’s, leiomyoma, sarcoma, melanoma, carcinoids), Large polyps, Blue rubber bleb nevus syndrome, Haemangioma, Radiation damage, Amyloidosis
6. Extra intestinal
   - Haemobilia, Wirsungorrhoea, Haemoptysis, Epistaxis, bleeding gums
7. No source identified.

Angiodysplasia
Gastrointestinal angiodysplasias are the most common cause of obscure chronic blood loss from the digestive tract with small bowel angiodysplasia accounting for up to 40% of obscure GI bleeding. The pathophysiology is unknown, but has been suggested to result from low grade venous obstruction of submucosal veins as they cross muscle layers. It is said to be more prevalent in chronic renal failure patients and in patients with aortic stenosis, although, recent reports have failed to confirm this link. Osler-Weber-Rendu Syndrome is an autosomal dominant condition characterized by angiodysplastic lesions involving the skin, mucosal membranes and organs other than the GI tract. Their endoscopic appearance is indistinguishable from other angiodysplastic lesions but more widespread.

Dieulafoy’s Lesion
Dieulafoy’s lesion is a cause of diagnostic difficulty in patients with repeated haematemesis. The exposed, eroded vessel in a very small mucosal defect is difficult to spot at endoscopy and accounts for perhaps 2% of upper GI bleeds. It was described in detail by Dieulafoy in 1896 who termed ‘Exulceratio Simplex’ as bleeding from a simple tortuous aberrant submucosal artery of small size. The typical endoscopic appearance is that of a dark red ‘nipple’.

Fig.-1: Cutaneous manifest of O-W-R
Fig.-2: Mucosal lesion of OWR
Fig.-3: Dieulafoy’s lesion
Gastric Antral Vascular Ectasia (Watermelon Stomach)
This was first described in 1952 by Rider et al and used to be called gastric antral vascular ectasia. Jabbari et al [14] coined the phrase “watermelon stomach” to describe the endoscopic features (Figure 4). Recognition of this characteristic lesion is important since it is commonly dismissed by less experienced endoscopists as antral gastritis.

Fig.-4: Watermelon stomach

Cameron Erosions
Erosive disease is an uncommon cause of severe upper GI bleeding. However, some lesions warrant mentioning as they are often overlooked or missed at endoscopy. Cameron erosions are chronic linear erosions (Figure 5) positioned on the crests of folds at the diaphragmatic impression with a large hiatus hernia15.

Fig.-5: Cameron lesion

Prolapse Erosions
Prolapsing gastropathy is a focal area with subepithelial haemorrhage and occasionally, erosions within a few centimeters of the cardioesophageal junction. This mucosal area prolapses into the distal oesophagus commonly from 10 o’clock position during retching, often prior to haematemesis.

Unusual Upper GI Malignancies
Adenocarcinoma accounts for 90% of gastric tumours with lymphoma accounting for 5%, stromal tumours 2% and the rest include carcinoids, metastases and others. GI involvement occurs in 50% of non Hodgkins lymphoma, with the stomach being the most common extranodal site. 95% of gastric lymphomas are non-Hodgkins lymphoma.

Other Vascular Disorders
The Blue Rubber Bleb Naevus Syndrome (Figure 6) is an example of intestinal haemangioma which is an autosomal dominant condition causing GI bleeding in infants and children.

Fig.-6: Jejunal phlebectasia

Haemobilia
Bleeding from either the biliary tree (haemobilia) or from the pancreatic duct (Wirsungorrhagia) into the duodenum can be difficult to identify. Recent series indicate iatrogenic trauma accounting for 40% and accidental trauma 20%16. Classically, patients present with the triad of pain, jaundice and melaena. A history of chronic pancreatitis or pseudocyst may be a pointer to a bleed from the pancreatic duct.

Evaluation
Evaluation starts from elaborate history and careful bedside examination to provide clue to the cause of bleeding.
History
A history can reveal ingestion of medications known to cause bleeding (e.g., aspirin, nonsteroidal anti-inflammatory drugs, alendronate, potassium chloride, anticoagulants). A family history might suggest a hereditary vascular problem.

Physical Exam
The bedside examination may be helpful in providing clues to the cause of bleeding (Table I). Rare causes of bleeding may be detected on physical examination like Plummer-Vinson syndrome, acquired immunity deficiency syndrome (AIDS), neurofibromatosis, Osler-Weber-Rendu syndrome, pseudoxanthoma elasticum, amyloidosis (Figure 7) and other diseases with typical cutaneous manifestations. Symptoms specific to the upper or lower intestinal tract may direct the initial endoscopic procedure, but data do not support limiting the evaluation to the symptomatic region.

Investigations
In OGIB, repeat EGD and colonoscopy with ileoscopy should be considered before performing a small bowel evaluation. A repeat EGD may yield a source even when the initial exam was negative. Zaman and colleagues reported that 64% of lesions identified with push enteroscopy were within reach of a standard endoscope. Commonly missed lesions in the upper gastrointestinal tract include peptic ulcers, Cameron ulcers associated with large hiatal hernia, and angiectasias. Lesions often missed in the colon include angiectasias and neoplasms. The diagnostic yield of repeat EGD is sufficient to recommend a second-look endoscopy. Adequate inflation to distend the folds in the upper stomach, a retroflexed endoscope and close examination of the mucosa posteriorly on the lesser curve may help to identify Dieulafoy’s. Multiple examinations are commonly required and the abnormality is sometimes diagnosed when pulsatile arterial bleeding is seen coming from apparently normal mucosa. In the absence of clear evidence of gastrointestinal bleeding, small-bowel biopsies should be taken to rule out celiac sprue in the evaluation of patients with iron deficiency anemia.

Gastrointestinal investigative techniques for occult and obscure bleeding are summarized in Table II.

![Intestinal amyloid](image)

Table I
Clinical Clues for Specific Causes of Gastrointestinal Bleeding

<table>
<thead>
<tr>
<th>Cause</th>
<th>Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age greater than 50</td>
<td>Carcinoma</td>
</tr>
<tr>
<td>Chronic renal failure</td>
<td>Vascular ectasia/angiodysplasia</td>
</tr>
<tr>
<td>Cutaneous hemangiomas</td>
<td>Blue rubber bleb nevus syndrome</td>
</tr>
<tr>
<td>Chronic diarrhea/abdominal pain</td>
<td>Celiac sprue</td>
</tr>
<tr>
<td>Acquired-immunodeficiency syndrome (AIDS)</td>
<td>Acquired-immunodeficiency syndrome (AIDS)</td>
</tr>
</tbody>
</table>
The British Society of Gastroenterology’s guidelines propose small-bowel evaluation with capsule endoscopy as first test for patients with bleeding if no bleeding source is identified on upper and lower endoscopy, as diagnostic yield is highest during or soon after a bleeding episode. On the basis of the findings, the clinician may proceed with push enteroscopy or double-balloon enteroscopy. Intraoperative enteroscopy should be reserved for patients with recurrent bleeding and transfusion dependency.
So in Patients with OGIB if endoscopic evaluation of upper and lower tracts is negative or equivocal, 2nd look examination by repeat upper and lower endoscopy is preferred before small bowel imaging [consensus/expert guidelines]. Cameron’s erosions (within a hiatal hernia), peptic ulcer disease and vascular ectasias are the most common upper tract lesions found on repeat endoscopy, and cancer and angiodysplasias (Figure 8) are the most commonly overlooked lower tract abnormalities.

Management
Importance of resuscitation can not be overemphasized. With adequate resuscitation as defined by hemodynamic stability there is significant reduction of post procedure complications. Antibiotic prophylaxis is another key component in the preparation prior to endoscopic intervention as there is likely development of transient bacteremia. Coagulation factor and platelet factor abnormalities should be assessed and corrected prior to endoscopy. Appropriate level of sedation can be reached through use of a benzodiazepine combined with a narcotic.

Endoscopy plays a major role in the evaluation of OGIB and the management approach is summarized in the flowchart (Table III).

Treatment and Outcome
Treatment varies according to the etiology of bleeding, its severity and patient comorbidities. Treatment options include endoscopic, angiographic, pharmacotherapy, surgical therapies and non-specific measures. Endoscopic therapies include thermal contact probes, laser coagulation, injection sclerotherapy and banding.

Thermal ablation of bleeding is the treatment most commonly used for accessible lesions. Endoscopic therapy is successful in more than 90% of cases of Dieulafoy’s bleeding. Adrenaline is frequently injected into the base prior to definitive treatment with electrocoagulation or more recently, band ligation. During angiography, interventional radiologists inject vasopressin or embolization material into bleeding vessels. Medical therapies are one of the few options available for diffuse vascular lesions, but they have limited success rates. Various thermal coagulation devices, including heater probes, bipolar probes, the Nd:YAG laser and the argon plasma coagulator appear to be successful in treating these lesions. Coagulation should begin at the central feeding arteriole and work peripherally. Primary treatment modality is the bipolar probe because it causes more superficial injury than other thermal methods. Laser treatment can cause deep injury relatively easily and must be used carefully.

Complication rates are low for gastric lesions and in the small bowel. Colonic complications are reported in...
Table-III

Flowchart - Management plan of Obscure Bleeding

Evaluation of obscure bleeding

No visible bleeding (occult)

Visible (overt) bleeding

Actively bleeding?

Yes

Repeat routine endoscopy

Nuclear scan and/or angiography

Negative

Repeat routine endoscopy

Positive

Enteroscopy, enteroclysis, small bowel series X-ray or capsule endoscopy

Negative

Further work-up needed?
Assess risks and benefits

No

Observation, transfusion iron supplementation

No recurrence

No further work-up

Yes

Diagnostic angiography and/or intraoperative enteroscopy

Negative

Consider repeating tests

Positive

Specific management
up to 10% cases and include partially treated lesions and perforation. Treatment is not required for incidental lesions. Treatment of isolated gastric lesions will often terminate bleeding, whereas many small bowel lesions are not reached and new lesions develop with time. Some patients will maintain a stable hemoglobin on iron therapy alone.

Gastrointestinal bleeding from arterial venous malformations has been successfully treated with combined hormone (ethinyl estradiol 0.035-0.05 mg; norethisterone 1 mg) therapy. However, continuous use of hormones for months has considerable side effects. The risk of thromboembolic events increases although observational studies have not confirmed a risk increase. With hereditary telangiectasias, von Willebrand’s disease, or angiodysplasias in the setting of end-stage renal disease Octreotide (Sandostatin), given at a dosage of 0.05 to 0.1 mg subcutaneously two to three times per day, has been successful in case studies.

Treatment of lymphoma is according to histology and includes helicobacter eradication for MALT lymphomas.

Unless a single causative lesion is identified, surgical therapy should be a last resort. Currently, exploratory laparotomy is seldom preferred without concomitant intraoperative enteroscopy in cases of transfusion dependant bleeding. Patients with obscure bleeding often have multiple bleeding sites and bleeding may persist after surgery.

Non-specific therapy represents the primary approach to treatment in selected patients and should not be considered as failure of diagnostic approach. Non-specific measures include iron replacement, correction of coagulation or platelet disorders, intermittent blood transfusions if anemia cannot be corrected with iron supplement alone. These measures are beneficial when rate of blood loss is slow and in elderly patients in whom the risk of further diagnostic evaluation is greater.

Conclusion:
There is no single efficient diagnostic test or therapeutic approach in the management of obscure GI bleeding. Most patients will benefit from a meticulous investigative routine that attempts to visualize as much of the bowel as necessary. Definitive therapy may not be possible in all the cases.

Non specific measures are beneficial when rate of blood loss is slow and in the elderly. There have indeed been a number of improvements in the management of OGIB but morbidity is still high. Adopting new technologies (endoscopic ultrasound, confocal laser endomicroscopy, narrow band imaging and endoscopic suturing devices) may be helpful in conquering this challenging problem.

Acknowledgement:
The authors thank Sabrina Mehnaz for her help in designing and editing the manuscript.

References:
1. Rockall TA, Logan RF, Devlin HB, Northfield TC. Incidence of and mortality from acute upper gastrointestinal haemorrhage in the United Kingdom. Steering Committee and members of the National Audit of Acute Upper Gastrointestinal Haemorrhage BMJ, 1995;311:222-226


CASE REPORTS

Non-Coronary Aortic Sinus Dilatation with Aortic Regurgitation in a Marfan’s Syndrome Patient
– A Case Report
M SIRAJ¹, MH RAHMAN²

Summary:
Aneurysm of the coronary sinus is an uncommon clinical condition. It is rare to come across an uncomplicated aneurysm as it remains silent and most of the available literature describe treatment plan after a rupture has taken place. Our case a 41 year old female also had aortic regurgitation and was a Marfan Syndrome patient. We carried out a modified Bentall’s procedure on an elective basis for this patient. It may be noted this is the first time such a surgical procedure has been carried out successfully in Bangladesh. Here we describe the rationale in deciding our treatment plan.

(J Bangladesh Coll Phys Surg 2010; 28: 183-188)

Introduction:
Marfan’s syndrome is a disease of the connective tissue. In the human body connective tissue holds and provides support to many structures throughout the body. In Marfan’s syndrome the connective tissue is abnormal, many systems are affected particularly the heart, blood vessels, bones, tendons, cartilage, eyes, nervous system, skin and lungs. Marfan’s syndrome is caused by a defect in the gene that encodes the structure of fibrillin and the elastic fibers. These are the major components of connective tissue.

In most cases, Marfan’s syndrome is inherited. The pattern is called “autosomal dominant,” meaning it occurs equally in men and women and can be inherited from just one parent with Marfan’s syndrome. People with Marfan’s syndrome, have a 50 % chance of passing along the disorder to their children. In 27% of cases a new genetic mutation defect occurs due to an unknown cause¹. Marfan’s syndrome is also referred to as a “variable expression” genetic disorder, in that everyone with Marfan’s syndrome has the same defective gene, but not everyone experiences the same symptoms to the same degree.

Marfan’s syndrome is present at birth. However, it may not be diagnosed until adolescence or young adulthood. Marfan’s syndrome is fairly common, the estimated incidence ranges from 1 in 5,000 to 1 in 10,000 persons². It has been found in people of all races and ethnic backgrounds, but is more common in China.

Sometimes Marfan’s syndrome is so mild, few if any, symptoms occur. In most cases, the disease progresses with age and symptoms of Marfan’s syndrome become noticeable as the changes in connective tissue occur. Marfan’s syndrome patients are usually tall and thin. Their arms, legs, fingers and toes may seem out of proportion, too long for the rest of their body. Their spine may have scoliosis and the sternum may either protrude or be indented inward. Their joints may be weak and easily become dislocated. Often, people with Marfan’s syndrome have a long, narrow face and the roof of the mouth may be higher than normal, causing the teeth to be crowded. More than half of all people with Marfan syndrome have eye problems.

Marfan’s syndrome cannot be diagnosed by a single molecular test but requires a scoring system that combines various diagnostic items. The so-called Ghent nosology subdivides diagnostic features into “major criteria”, “minor criteria”, “organ involvement” and manifestations that only in combination with other...
manifestations constitute a “major” or “minor” criterion. Individuals without a family history of Marfan’s syndrome require major criteria in at least two different organ systems and involvement of a third organ system. Individuals carrying an \( FBN1 \) mutation known to cause Marfan’s syndrome or cases with a positive family history require one major criterion and involvement of an additional organ to establish Marfan syndrome\(^3\).

A thorough physical examination of the eyes, heart and blood vessels, and muscle and skeletal system; a history of symptoms; and information about family members that may have had the disorder usually leads to a diagnosis. Other tests, such as Chest X-Ray, ECG, Echocardiography, Trans Esophageal Echocardiography, CT scan, MRI and CT Angiography are useful tools in the diagnosis. Nowadays CT Angio is proving itself to be a very valuable tool in showing the vascular system changes.

**Case Report:**

Ours was a 41 year old female patient born on the 6\(^{th}\) of January 1968. She is the youngest among four brothers and three sisters. She grew much taller in comparison to her siblings. The physical height of her parents were in proportion to her siblings. Her first symptom was about the age of 14 years in 1982. She describes her symptoms as “palpitation” for which she consulted a village doctor. The symptoms however continued intermittently and were not severe enough to be a cause of undue concern to her or to the family. She got married in 1991 at the age of 23 years. She gave birth to a daughter in 1993 and a son in 1997. Both the pregnancies had a normal course resulting in normal vaginal deliveries. Around the beginning of 2005 her “palpitation” as she described it increased. She consulted an herbal practitioner who prescribed her a “Hamdard” preparation. This did give her a good response and she was alright till the end of 2005. Now the “palpitation” reoccurred. This time she consulted a cardiologist in early 2007 who arranged for an Echo Doppler study of the heart and a coronary angiogram. The reports showed a normal coronary tree, dilated non-coronary sinus and a grade III aortic regurgitation. With this report she contacted the surgeon at our hospital in December 2007. A repeat Trans thoracic echo study of the heart and a CT Angio was done. The Echo showed a hugely dilated aortic root with aneurismal non-coronary sinus, also severe aortic regurgitation. CT Angio very beautifully demonstrated the anatomy. The details are given below.

Her daughter now 14 years old has also grown much taller than her brother and has a thin skeletal frame. All these findings warranted a surgical intervention. Rationale and logic behind choosing a particular type of surgical procedure is given in the discussion part. The patient was electively admitted on the 3\(^{rd}\) of January 2008.

Physical examination revealed she was normotensive with a blood pressure of 130/60 mmHg, heart rate was 60 per minute and regular, heart murmur of aortic regurgitation and a clear chest on auscultation. She was 168cm in height (much taller then her siblings and parents) and weighed 65Kg. All blood investigations were within normal limits, ECG and Chest X-ray were normal. Echocardiography report stated hugely dilated aortic root with aneurismal non-coronary sinus, normal chamber dimensions and wall thickness, intact IAS and IVS, no thrombus or vegetation, severe aortic and mild tricuspid regurgitation, mild pulmonary hypertension. CT Angiogram clearly showed the abnormal anatomy. Root of the aorta measured 55.0X46.6 mm, non-coronary sinus 34.7X36.7 mm in size, ascending, arch and descending aorta appeared normal.

After due explanation consent was taken and the patient was taken to the operating room on the 6\(^{th}\) of January 08. General anaesthesia was induced taking into account problems specific to the underlying pathology of Marfan’s Syndrome. Systolic blood pressure was maintained between 85 – 110 mmHg throughout the peri-operative period. This is necessary to avoid suture line dehiscence, aortic dissection distal to the prosthesis. Furthermore the patient was unduly sensitive to narcotics and muscle relaxants. This was managed using short/intermediate acting drugs namely Fentanyl and Propofol. The procedure was carried out via median sternotomy. The patient was connected to the heart lung machine using an aortic and two stage venous cannulation. The patient was cooled down to 26 degree Celsius. Heart was arrested after aortic cross clamp using antegrade cold blood cardioplegia directly into the coronary ostia. Operative findings confirmed the preoperative investigations. The wall of the aneurysmal non-coronary sinus was extremely stretched and thinned out suggesting a possible rupture in the near future. A modified Bentall’s procedure was carried out with reimplantation of the
coronary buttons. An ATS size 27 composite graft prosthesis was used. After removal of the cross-clamp there was significant bleeding from the left coronary button. We were unable to control it satisfactorily. Also remembering that bleeding and arrhythmias are a common cause of post Bentall mortality. We decided to redo the left coronary button. The heart was again cooled down, cross clamp applied and arrested with antegrade root cardioplegia. The graft to aorta suture line was taken down. The left coronary button was oversewn and the procedure was completed as before. There was good haemostasis this time. The patient came off bypass with moderate ionotropic support. The patient was closed and was shifted to the ICU in a stable condition. The Bypass time was 322 minutes and the total cross clamp time was 148 minutes. External pacing was started at 120 per minute as the desired heart rate was not present.

In the ICU patient started getting isolated ventricular ectopics which steadily got worse despite correction of all possible causes and doing the recommended medical management. Arrhythmia following Bentall’s procedure is a common complication and sometimes is due to kinking of the coronaries just distal to the buttons. In order to improve coronary perfusion an Intra Aortic Balloon Pump (IABP) was inserted electively. Though this improved the haemodynamics but the arrhythmia did not improve. Soon after, the patient started getting runs of ventricular tachycardia and ventricular fibrillation needing DC shocks. As the situation got worse the patient was reopened in the ICU. There was very little collection, heart behaved normally as long as the sinus rhythm was maintained. But the bouts of VT and VF continued needing defibrillation by internal paddles. Just when we had nearly given up hope we decided to stop the external pacing to carry out a certain maneuver. But this had a completely unexpected response. The heart momentarily went into asystole then reverted back into sinus rhythm with a heart rate of 80 – 82 per minute. There were no further episodes of arrhythmias of any type and haemodynamics improved to the extent that we had to reduce ionotopic support rapidly. It seems all this time the arrhythmia was due to “R on T” phenomenon resulting from the external pacing. This was a lucky find in a desperate situation. From this point of time onwards the patient made a smooth and steady recovery. The patient was moved to the surgical ward on the 3rd post operative day. She was discharged on the 8th post operative day after the INR had come up to the desired level.

On discharge the patient was prescribed Warfarin to keep the INR between 3.00 and 3.5, Metprolol to reduce the heart rate and blood pressure, Digoxin partly to reduce the heart rate and also to act as an ionotopic agent and NSAIDs for pain relief.

**Discussion:**

The treatment approach depends on the structures affected and the severity. Medications are not used to treat Marfan’s syndrome, however they may be used to prevent or control complications. Beta-blockers and calcium channel blockers are used to prevent or to slow down the enlargement of the aorta. Surgery for Marfan’s syndrome is aimed at preventing aortic dissection or rupture and treating valve problems. It is also the only way to deal with the same complications when they actually happen. Composite valve graft replacement or valve sparing procedures can be done. With valve-sparing operations, there is risk of possible re-operation in future, because the long-term durability of this type of repair is not yet established.

Advances in the use of medication and surgery have dramatically increased the lifespan of people with Marfan’s syndrome. An average life expectancy in 1972 was about 45 years. The average life expectancy now is approaching that of the general population. Providing great hope and optimism to people with Marfan’s syndrome and their families. This change has occurred primarily because of the quality of surgical intervention, although drug therapy may also have played a role. But, only through increased awareness about the disorder, earlier diagnosis and proper treatment can a person with Marfan’s syndrome have realistic hope to live a normal life span.

Immediate surgical intervention is the single, life-saving measure to rescue patients with acute dissection or intramural haemorrhage of the ascending aorta (Stanford type A). However, it may only be 20% of individuals with acute aortic syndromes who make it into the operating room, and of those who get operated upon more than 10% do not survive acute intervention. Moreover, survivors of emergency surgery frequently experience complications from the dissected aortic flap that persists downstream from the ascending aorta. Conversely, when the aortic root is replaced before
complications occur, both early and late survival improves dramatically. A classical study with retrospective review of outcomes from 10 centers has set the standard for elective prophylactic aortic root replacement in Marfan's syndrome. The vast majority of patients were treated with a composite-graft replacement according to Bentall and De Bono or a modification of that technique. The study documented an early mortality of 1.5% and an actuarial survival rate of 84% at 5 years, 75% at 10 years and 59% at 20 years.7

Sinuses of Valsalva are three localized bulgings in the aortic root opposite the cusps of the aortic root. Aneurysm of the sinus is a rare condition which may be a congenital or acquired cardiac anomaly, having an incidence of 1.09% in the oriental population and 0.2% in the western population.8 Aneurysms of the sinus of valsalva are not usually clinically apparent unless perforation occurs which simulates aortic regurgitation. The two anterior sinuses are named after their respective coronary ostia. That is right coronary sinus and left coronary sinus and posterior coronary sinus is called the non-coronary sinus.

The unruptured aneurysm is usually silent and it often remains undiagnosed but may cause symptoms by right ventricular outflow obstruction.10 The rupture may occur into any cardiac chamber, predominantly the right ventricle, the intraventricular septum, and the pericardial space.13

Surgery of the aortic root removes the weakest spot in the cardiovascular system of Marfan patients. However, with increasing life expectancy weaknesses of the heart valves, the myocardium and distal aorta get time to evolve. Currently, about one quarter of Marfan patients requiring surgery undergo mitral valve surgery, another quarter undergo reintervention at distal sites of the aorta, 6% have tricuspid valve surgery, and 3% require heart transplantation for dilated cardiomyopathy.14 Moreover, 21% of adult Marfan patients develop ventricular arrhythmia with lethal outcome in 3% of cases.15 We believe that future strategies need to consider these potential complications.

Patients with aneurysm of sinus of valsalva remain asymptomatic clinically unless the aneurysm ruptures. The onset may be sudden or insidious. In our case patient presented with palpitation the investigation of which resulted in the diagnosis.

The decision to operate in these cases is frequently not simple: there is a substantial gray area that changes with time.

Recommending surgery at a diameter of 6 cm may have been appropriate in an era when the surgical mortality for elective replacement of the ascending aorta was relatively high. Today, in light of a markedly reduced risk of elective surgery, it seems excessively conservative. Strict adherence to this guideline from another era undoubtedly leads to missing the opportunity to prevent lethal complications in a substantial number of patients with a dilated ascending aorta.17 There are no large follow-up studies to give a guideline for such a situation.17-20 To make matters worse there are hardly any recommendations available for an unruptured coronary aneurysm with aortic regurgitation in a Marfan’s Syndrome patient.

Currently, elective root replacement with an appropriately chosen technique should not carry an operative risk much higher than that of routine aortic valve replacement. Composite replacement of the aortic valve and the ascending aorta, as originally described by Bentall, DeBono and Edwards (classic Bentall), or modified by Kouchoukos (button Bentall), remains the most versatile and widely applied method.

In our case we were faced with a clinical situation which by it self is a rare occurrence.21 Furthermore this clinical entity is usually silent prior to rupture. There are publications in relation to sinus aneurysm but most of them deal with the measures taken after rupture. Publications dealing with an unruptured sinus aneurysm are very difficult to come by. One such paper describes a non-coronary sinus aneurysm accidentally discovered after a road traffic accident in a 38 year old male. As we already know such aneurysms can be caused by clinical conditions other than Marfan’s syndrome.22-24 Investigations also showed a moderate to severe aortic regurgitation. The patient underwent elective surgery when a metallic prosthetic valve was used to replace the aortic valve and the non-coronary sinus was repaired by direct suturing. The clinical scenario was very much similar to ours except the fact the patient was a Non-Marfan. This was a prime consideration in deciding our direction of treatment. Marfan syndrome is a progressive disease where the problems usually starts as a sinus dilatation and slowly progresses to full
blown aortic dilatation. Replacing the aortic valve and repairing the aneurysm would have been a simpler approach. But literature exists stating such case have returned years later with aneurysm of the remaining sinuses with or without aortic dilatation. A redo surgery in such situations carries a very high risk.

How do deal with an uncomplicated coronary sinus aneurysm generates much controversy with some advocating a conservative approach whilst others favoring aggressive surgery. We took the following strategy in deciding our surgical treatment.

We established the diagnosis of Marfan’s Syndrome based on the following:

Cardio-vascular – regurgitant aortic valve, aneurysmal non-coronary sinus

Skeletal - Increased arm span–to–height ratio, reduced upper-to-lower segment ratio, positive thumb (Steinberg) sign, joint hypermobility, high arched palate with dental crowding

Skin and integument - Striae atrophicae not associated with pregnancy or repetitive stress

Family history – Both her daughter and son exhibited the same skeletal and skin criteria of Marfan’s syndrome. But for social reasons the family declined the daughter to be examined. She was approaching marriageable age.

Next we took note of the fact that emergency or urgent surgery after a complication has occurred carries a very high mortality. Even post operative mortality and morbidity is high. Therefore we decided on an elective surgical intervention. We also have to remember all the studies published are in the western countries where the home to hospital time is very short. The complete opposite is true for our country.

Next on deciding upon the type of surgical intervention the underlying Marfan’s condition had a very important bearing. Changes in the vessel walls are the commonest complication of Marfan’s Syndrome and these changes manifest themselves with time. An aortic valve replacement with aneurysm repair ran the risk of the patient returning with additional changes in the future. So we went ahead and did a Modified Buttonhole Bentall’s Procedure. This procedure also took care of the aneurysmal non-coronary sinus thereby eliminating the possibility of any future rupture.

There are no guidelines how to deal with an aneurysmal coronary sinus. We sifted through existing surgical experience as available. We decided on what we thought was best for the patient taking into consideration the underlying Marfan’s Syndrome and aortic regurgitation. We decided to surgically address not only the aneurysmal coronary sinus and the aortic regurgitation, but also the potential problem of aortic root dilatation in the future. Till the write up of this paper the patient was keeping a very good health.

The purpose of writing this paper is to contribute some ideas about a clinical situation, on which very little has been published. We hope our opinion will be shared by others so that a guideline may be established in the future.

References:


Summary:
A young boy of 18 years was admitted at department of Neurology, Dhaka Medical College Hospital with the complaints of progressive generalized hyper-pigmentation, gradual loss of vision, hearing impairment, abnormal behaviors and one episode of seizure. Examination finding revealed, abnormal behaviors, generalized hyper pigmentation of skin, oral mucosa, gum, tongue and palmer creases. He has diffuse hair loss, bilateral primary optic atrophy, bilateral sensoryneural deafness. All routine investigations revealed normal findings except, CSF protein were elevated, biochemical features (very high ACTH, low basal cortisol) of primary adrenal failure, Magnetic resonance imaging (MRI) of the head showed bilateral symmetrical white matter abnormalities in parieto-occipital regions. The diagnosis of Adreno-leukodystrophy (ALD) was strongly suggested from the medical history, biochemical and radiological (MRI) findings of brain. The purpose of our report is to highlight this very rare nontreatable disease to all. A patient of neuropsychiatric symptoms with Addison’s disease we must think about ALD, because it’s progression can be delayed with early diagnosis and supportive treatments, it’s incidence can be reduced by genetic counseling.

Key words: Adrenoleukodystrophy (ALD), Addison’s disease, Very long chain fatty acid (VLCFA).

Introduction:
Adrenoleukodystrophy (ALD) is a group of genetically determined peroxisomal disorders associated with progressive central demyelination of brain, primary adrenal cortical insufficiency (Addison’s disease) and hypo-gonadism. The more common form of ALD is X-linked with abnormal gene location in Xq28 region and occurs in childhood or adolescence; however, a neonatal form occurs from autosomal recessive inheritance. ALD affecting 1/20,000 males whose having impaired ß-oxidation of very long chain fatty acids (VLCFA) in peroxisomes, particularly hexacosanoic acid (C26:0), pentacosanoic acid (C25:0) and tetracosanoic acid (C24:0), which accumulate in tissues and body fluids. This accumulation probably incorporated into myelin which leads to instability and dysmyelination with possible direct cytotoxic effect on oligodendrocytes. At least seven clinical subtypes have been described: childhood cerebral ALD (more severe form), adolescent cerebral ALD, adult cerebral ALD, adrenomyeloneuropathy (AMN), Addison’s disease only, presymptomatic (asymptomatic) and heterozygous women. Most patients are diagnosed in childhood or adolescence when they have such neurologic manifestations as cognitive dysfunction, behavioral problems, visual loss, seizures or features of adrenal insufficiency. Progression is usually rapid, with the patient reaching a vegetative state within 10 years after the neurologic symptom onset. In patients with Addison’s disease, diagnosis of ALD is suggested by the abrupt development of neuropsychiatric symptoms, associated with MRI confirmation of extensive, usually symmetric, white matter disease. Here we report a case of ALD.

Case report:
A 18 years old young boy from Feni was admitted at department of Neurology, Dhaka Medical College Hospital with the complaints of progressive blackening of the whole body for the last 15 years, gradual impairment of vision for last 7 years, hearing impairment and abnormal behaviors noticed for last 3 months. He started his schooling at the age of five, but failed to continue due to lack of attention, and subsequent visual impairment. Gradually he also started having hearing impairment. He had a single episode of seizure 3 months back. During his hospital stay he also had features of
psychosis and complained of vertigo. His past medical history was unremarkable. Prior to his admission to the hospital he was not on any medications except for some herbal products. His family history was also unremarkable. Examination finding revealed, generalized hyper-pigmentation (Fig-1,2) of skin including pigmentation of the oral mucosa, gum, tongue and palmer creases. He has diffuse hair loss, his blood pressure was within normal limits without any postural drop. His genital examination revealed testicular atrophy. Neurological examination revealed, bilateral primary optic atrophy (confirmed by ophthalmologist), sensory-neural hearing loss in both ears (confirmed by Audiometry). All routine investigations revealed normal findings, but CSF examination revealed high protein: 208 mg/dl (normal level 15-45 mg/dl) without any change of cell count, glucose and microbiological findings. Serum electrolytes were within normal limits.

On imaging abdominal USG was normal but MRI of the brain showed bilateral symmetrical hypointence signal change in T1 weighted images and bilateral symmetrical hyperintance signal changes in T2 and Flair weighted images in the sub cortical white matter of both parieto-occipital regions, which were compatible with Leukodystrophy (Fig-3,4,5). His basal cortical level was
1.95 micg/dl at 9.00 AM (normal level 5-25 micg/dl at morning), serum ACTH level was >1250 pg/ml (normal level 5-46 pg/ml). The diagnosis of adrenoleukodystrophy was strongly suggested from the medical history, biochemical and radiological (MRI of head) findings. Then treatment was started with antipsychotic and prednisolone with good control of symptoms. Now he is in regular follow up.

**Discussion:**
The clinical course in adrenoleukodystrophy is characterized by behavioral disorders, ataxia, visual loss, decreased hearing, and epileptic seizures, followed by mental deterioration, psychosis and death. Adrenal insufficiency is a usual finding, but does not always precede neurologic disease 5,6. Abnormal skin pigmentation and other features of adrenal insufficiency may become apparent before neurological symptoms. In some cases adrenal symptoms will never appear 7.

Most common cause of primary adrenal insufficiency are either autoimmune adrenal failure (about 75% to 80%) or tuberculosis (about 20%) 1, other etiologies such as ALD are thought to be distinctly uncommon 1. We should think of ALD when adrenal insufficiency associated with neuropsychiatric manifestations, like our patient.

Typically demyelination begins bilaterally in the occipital region, extending across the splenium of the corpus callosum. Gradually the process spreads outward and forward as a confluent lesion, affecting the parietal, temporal, and finally, the frontal white matter, cerebellar white matter, cerebellar peduncles, and corticospinal and corticobulbar tracts. Calcium deposition can also be found. MR is more sensitive than computed tomography to detect these demyelinating plaques. Plain MRI show hypointense signal on T1 and hyperintense signal on T2 and flair images. Post contrast study shows contrast enhancement at the outer margins due to active demyelination and disruption of blood brain barrier 7.

VLCFA can be measured in plasma, which will be raised. Features of primary adrenal insufficiency (Serum ACTH, ACTH stimulation test, Serum. Cortisol, Serum. testosteron & gonadotropin level) should be measured 8.

The prognosis of ALD can be estimated on the basis of age and the severity of the brain MRI abnormality, but there are exceptions to these rules, and some patients

**Fig-4:** Axial T2 weighted MRI of brain showing symmetrical, bilateral hyperintence signal changes in sub cortical white matter of both occipito-parietal regions.

**Fig-5:** Axial Flair MRI image of brain showing hyperintense signal change in the same regions.
may remain stable with no further progression for up to 12 years after the initial neurological symptoms \(^9\).
Although childhood cerebral form, causing a severe disability that leads to death early. On the other hand, the adrenomyeloneuropathy is a milder adult form with involvement of mainly the spinal cord and peripheral nerves, having a slow progression with better prognosis. Treatment is symptomatic, for example, steroid use for adrenal insufficiency and psychotropics for psychiatric symptoms. No clear effective treatments are available, although Lorenzo’s oil (4:1 glycercy trioleate and glycercy trierucate) can be used before the age of 6 may reduce the probability of develop neurological deficit in late life\(^2,8\). Statins can reduce VLCFA level, but no influence in neuronal and endocrine functions \(^2,8\). Fatty diet should be restricted. Bone marrow transplantation is an option in patient with early neurological features, abnormal magnetic resonance imaging scans and neuropsychological dysfunction but is not recommended in the severely affected group (i.e. performance IQ\(580\)) and has a significant morbidity and mortality \(^2,8\). As ALD is an X-linked recessive disorder, genetic counseling of family members may be advisable. Early diagnosis also brings the possibility of genetic counseling; carrier detection and antenatal diagnosis and thus we can reduce the incidence of this devastating disease.

References:
Goldenhar Syndrome-A Case Report

MAR SIDDIQUEa, J HOSSAINb, MJ ABEDINC, M PARVEZd

Summary:
A 7 years old boy was diagnosed a case of Goldenhar Syndrome. He presented with swelling in the upper and outer part of the left eye as limbal dermoid associated with preauricular tags, hemifacial asymmetry, microtia and small chin since birth. His vertebral anomalies also detected by skiagram of the vertebral column as spina bifida. His ocular and auricular problems were solved by surgery without any complications. Patient is leading a normal life.

Introduction:
Goldenhar syndrome is a birth defect resulting from the maldevelopment of the first two branchial arches with incomplete development of the ear, nose, soft palate, lip and mandible. The phenotype is highly variable. Goldenhar Syndrome is one of the Variants of craniofacial anomalies. It is unilateral in 70-80% of the cases. It is known as oculoauriculo vertebral (OAV) dysplasia. The syndrome complex includes limbal dermoid or lipodermoid, pre-auricular tags, hemifacial asymmetry and vertebral anomalies. These are the common anomalies of the condition. It is a rare condition characterized by the triad (usually unilateral) of craniofacial microsomia, ocular dermal cyst and spine anomalies. Age of onset during neonatal & infancy. Prevalence rate is in 1-9/100000, incidence rate is 1 in 25000-45000 births. Male is more commonly affected than the female (ratio 2:1). Most of the cases of OAV are sporadic, autosomal dominant transmission is reported for 1% - 2% of the cases. A few person manifested with autosomal recessive inheritance has been reported. Aetiology of the syndrome remains unclear. Currently a deficiency in mesodermal formation or defective interaction between neural crest or mesoderm is suggested as possible aetiology. Different factors also contributed to the development of the disease such as: ingestion of some drugs (Cocaine, Thalidomide, Retinoic acid and temoxifen), environmental factors (Insecticides, Herbicides) and maternal diabetes. Ocular anomalies occur about 50% of the case of OAV. Epibulbar dermoid and lipodermoid are the most common. Coloboma of the upper eyelid may be present. Limbal dermoid or lipodermoid are mainly located in the inferotemporal region of the eye. Ocular defects are reported in 65% of the cases and include pre-auricular tags, microtia, anotia & conductive hearing loss. Vertebral anomalies are combination of hemivertebra, fused ribs, kyphosis and scoliosis. Additional features - cardiac, genito-urinary and pulmonary systems can also be affected. Cardio pulmonary distress within the few months of life is relatively common life threatening complication. The purpose of this article is to report a rare case of craniofacial anomalies and manage satisfactorily.

Case Report:
A 7 years old boy reported to BNS Patenga a Naval Hospital of Bangladesh Navy at Chittagong on 07 july 2008 with complaints of swelling of the upper and outer part of the left eye associated with preauricular tags, hemifacial asymmetry, microtia, small chin and abnormalities in the spine. The swelling in the inferotemporal region of the left eye was gradually increasing and causing obstruction of the visual axis by the drooping of the eye lid. The patient was examined thoroughly. Ocular examination revealed a small soft mass of the left eye locating in the inferotemporal region obscuring the visual axis. But his visual acuity was 6/6 in both eyes. Fundoscopic examination was found normal. ENT examination revealed preauricular tags present in the left ear and small ear present on the left side. No other abnormalities are detected. Systemic examination like cardiovascular, pulmonary and genito-urinary systems are done but no abnormalities are detected. CNS examination showed slow mental uptake. The laboratory investigations are within normal limit. ECG - normal, X-ray chest (postero anterior view) showed nothing abnormality detected, X-ray of the vertebral column showed spina bifida. The patient operated under GA for his visual and auricular anomalies. The result was satisfactory without any complications or no uneventful occurrence happened. Now the patient is cured and leading a normal life.
Discussion:

Goldenhar syndrome is known as oculoauriculo vertebral dysplasia. It is proposed to represent a variant of hemifacial microsomia group. It includes hemifacial hypoplasia, oculoauriculo vertebral dysplasia and first and second arch syndrome. The involvement is unilateral in 70%-80% of cases. Ocular manifestation are limbal dermoid or lipodermoid and occasional coloboma of the upper eye lid. Limbal dermoid is more common than lipodermoid. It is usually present in the inferotemporal quadrant and can be bilateral in 25% cases. There are 2 types of limbal dermoid - large & small. The larger one interferes with the visual axis causing astigmatism and predisposing to secondary strabismus from anisometric amblyopia. Other associations are Duane Retraction syndrome and lower incidence of decreased corneal sensation, cataract and iris abnormalities. Ear tags are common. Inner ear anomalies are occur in some cases. The central nervous system are occasionally affected. Vertebral anomalies are common which includes kyphosis, scoliosis and lumber lordosis. Hemifacial asymmetry is also common. Other findings include microtia, macrosomia and mandibular anomalies. The clinical diagnosis is based on the obvious clinical findings and other laboratory and radiological findings. The most common complaints of swelling in the left eye lid, preauricular tags, difficulty in opening of the mouth and difficulty in walking occasionally. The most common findings are limbal dermoid or epibulbar dermoid in the upper and outer
part of the left eye. Other includes preauricular tags, microtia and hemifacial asymmetry. Vertebral anomalies are not obvious in this particular case. X-ray of the vertebral column is done to exclude vertebral anomalies. Only spina bifida is detected by skiagram which is not significantly affects the child. Treatment of the disease varies according to the severity of the manifestation. With regard to the rule of ophthalmology is aimed first at strong amblyogenic risk causing obstruction of the visual axis, severe astigmatism or strabismus, second at ocular exposure (due to large coloboma or large limbal dermoid preventing lid closure), third at working with craniofacial surgeon in case of severe muscular weakness that requires reconstruction of the upper face. Systemic treatment may be related for cardio-renal or CNS malformation. Surgical treatment of the condition related to large coloboma requires surgical repair and spectacle correction, large limbal dermoid needs excision of the dermoid with lamellar keratoplasty. Severe anomalies of the mandible requires reconstruction with bone graft. In case of microtia or other ear defects needs extensive ear reconstruction to be done within 6-8 years of age. If the facial or congenital malformation are severe speech therapy is required. In this particular case there is anomalies of eye and ear that was corrected by surgical intervention without any complications. Patient is now cured and leading a normal life.

References:
2. Basic AAO and clinical science course, 2003-2004, Section-6, Page 391-92
Thrombocytopenia is a common diagnostic & management issue during pregnancy. Asymptomatic thrombocytopenia occurs near term or peripartum period in about 5% normal pregnancies. The reference range of a normal platelet count in non pregnant women and newborns is 150,000-400,000/µL. However, platelet counts during pregnancy are normal in most women. Thrombocytopenia in pregnancy has many common causes, including gestational thrombocytopenia, viral and bacterial infections, and preeclampsia complicated by hemolysis, elevated liver enzymes, and low platelet (HELLP syndrome) count. This article focuses on the gestational thrombocytopenia, immune thrombocytopenic purpura (ITP) and neonatal alloimmune thrombocytopenia (NAIT) and its management during pregnancy, labor and puerperium. These relatively rare causes of thrombocytopenia are important, as neonatal outcomes can be significantly impaired and subsequent pregnancies can be affected.

Case Report:
A 30yrs old lady became pregnant for 3 times and given birth thrice (G3 P3). Her 1st two pregnancies were uncomplicated but 3rd pregnancy complicated by severe thrombocytopenia. She was admitted to DMCH with the complaints of 36 weeks pregnancy, lower abdominal pain and less fetal movement for three days. She has been suffering from ITP for the last 8 months. She treated with Prednisolone during pregnancy period, platelet transfusion before and after delivery and Danazol in puerperium. Her baby was delivered by caesarean section. Her intra-operative and post operative period was uneventful. She delivered a healthy male baby weighted 2.5 kg and breast feeding established successfully. She was discharged on seventh post operative day. The aim of this case report to reveal pregnancy with ITP and its clinical presentation, investigation and management with review of relevant literatures.

Journal of Bangladesh College of Physicians and Surgeons
Vol. 28, No. 3, September 2010
antibody and Anti-ds DNA were negative. Bone marrow study showed that normal M: E ratio and Dysmegakaryopoises. She became pregnant during her lactational amenorrhoea period. Positive pregnancy test and sonography (11 wks 4 days) confirmed her pregnancy. Because of risk of severe bleeding and complexity of the disease, they (Couple) decided to continue the pregnancy. She developed severe per vaginal bleeding at her 12 weeks of gestation and admitted at DMCH for splenectomy operation. She was duly immunized against pneumococcus, meningococcus. Her active bleeding was stopped after fresh frozen plasma transfusion and sonography revealed that single viable pregnancy of 13weeks size, moderate amount of retro placental collection and no splenomegaly. Her splenectomy operation was postponed and pregnancy was continued uneventfully till term. Her anomaly scan was done at 24 weeks of gestation & revealed no fetal anomaly.

After admission in the hospital, she was followed up for one week. Clinically she was well. There were few purpuric spots, especially in the legs. Her all test reports and USG of pregnancy profile was normal except total platelet count (TPC) which was less than 10000/ µL of blood. Her TPC rose to 50,000/ µL by allowing complete bed rest and reducing physical activity in addition to Prednisolone. After consultation with hematologist her pregnancy was terminated by elective caesarean section. She was transfused four units of platelet before caesarean delivery was performed within one hour after transfusion. Her platelet transfusion continued for three consecutive days in the same way and start Danazol (100mg) orally from the first post operative day. Her intra-operative and post operative period was uneventful. She delivered a male baby weighted 2.5 kg, APGAR score 8/10 and 10/10. Immediately after delivery baby was seen by Pediatrician and found healthy. Breast feeding established successfully. She was discharged on seventh post operative day with platelet count was 20000/ µL and platelet count rises 400000/µL after seven days.

Discussion:
Pregnant women with ITP can be asymptomatic or may present with a history of easy bruisability, bleeding into the mucous membranes (epistaxis or gingival bleeding), or purpura IT 1,2,4,5 ITP occurs in all races 1 and is diagnosed more commonly in females than males (ratio 3:1) 1,2,4-6, specially in women of child bearing age (2nd and 3rd decade of life) 1,4,5 with an incidence of one to two in 1000 pregnancies. They may have a history of menorrhagia or menometrorrhagia prior to pregnancy, history of delivering a term newborn with thrombocytopenia, visceral or intracranial hemorrhage, or spontaneous or prolonged bleeding after venipuncture 4. Most women with ITP have normal findings on physical examination (splenomegaly is absent) and purpura may be present especially in the lower limb 4,7. Newborns have normal findings on physical examinations, no cephalohematoma, ecchymoses over the presenting part, and no purpura 4.

ITP is a diagnosis of exclusion with peripheral thrombocytopenia and normal or increased megakaryocytes in the bone marrow, red and white cell count is normal 1,2,4. There is no history of drug intake (e.g., heparin, sulfonamides), Gestational thrombocytopenia, Preeclampsia in current pregnancy, and other medical conditions that can cause thrombocytopenia (e.g., leukemia, viral infection) 4. Platelet counts less than 70,000/ µL are suspicious for the disorder 1. Bone marrow aspiration demonstrates normal or increased numbers of megakaryocyte. Anti platelet antibodies can be detected in the serum of women with ITP. A negative test does not exclude the diagnosis 1.4,5,7. Additionally, many women with gestational thrombocytopenia have high levels of circulating platelet-associated immunoglobulin 1.

References:


7. Lynnae millar, MD; Immune Thrombocytopenia and Pregnancy, Last Updated: June 29, 2006.


Bezoars are rare but bizarre and well known entity. We recently treated three cases of bezoar in the stomach and intestine presenting with obstructive symptoms. The presentation and findings were suggestive. These were removed surgically with relief of symptoms.

**Case 1:**
Miss M, a 12 year old female child was brought with complaints of abdominal pain and vomiting for two weeks. She was suffering from recurrent abdominal pain for about a year. Pain was mostly in the epigastrium, aggravated after meals and frequently followed by vomiting. There were episodes of severe pain but she had no hematemesis or melaena and her bowel habit was normal. She was reluctant to eat as she did not feel hungry. She has recently lost weight for two-three months and for last two weeks was taking liquids only. On enquiry mother agreed that the child has the habit of taking her own hairs for quite long time.

On examination, she was anaemic. Upper abdomen was slightly bulged. A hard smooth lump with rounded lower border was palpable in the epigastrium. It could not be moved. There was no other organomegaly. Respiratory and other systemic examination was essentially normal. Plain radiology of abdomen and chest and routine blood or urine tests were normal. CT scan showed a large mass extending into the duodenum. A diagnosis of Tricobezoar was made. An upper midline incision was made. Stomach was found larger than usual, compactly filled with a hard mass in the stomach. A gastrotomy was done and the concretion was delivered intact. Post operative period was uneventful.

**Case 2:**
Mr S.A, a 26 year young man presented with complaints of repeated acute abdominal pain along with vomiting and abdominal distension for about two years. Pain was central abdominal, sudden, colicky and relieved after a few hours. He was hospitalized twice for this. On examination everything was normal except an abdominal lump that was firm, slightly elongated, non-tender and freely mobile. In a repeat physical examination the lump could not be palpated. A barium

---

**SHORT COMMUNICATION**

**Bezoar, A Rare Cause of Gastrointestinal Obstruction**

MM HUSSAIN\(^a\), CA KAWSER\(^b\)


---

Photograph of the Bezoar conforming the shape of stomach and also extension into duodenum.

CT scan coronal plane showing extension of Bezoar into duodenum.

---

\(^a\) Prof. Md. Margub Hussain, Professor of Surgery, Dhaka Medical College, Dhaka

\(^b\) Prof. CA Kawser, Professor of Paediatrics, BSMMU, Dhaka

**Address of Correspondence:** Md. Margub Hussain, Professor of Surgery, Dhaka Medical College, Dhaka
follow through was normal. Exploration revealed a firm solid mass in the ileum at the terminal part. Attempt for fragmentation failed. The bezoar was pushed proximally and taken out through enterotomy. It consisted of vegetable seeds and fibers. There was no other mass in stomach or jejunum.

**Case-3:**
One of the author was called in to see a girl of 6 years with features of acute abdomen. She was complaining of abdominal pain and vomiting after each feed. She was treated in the clinic as acute abdomen with suction, saline and antibiotic. On examination a firm, nontender, elongated mass without any mobility could be felt in the epigastrium. Bowel sound was normal. There was no other significant abnormal physical finding except thin built. Extensive laboratory work-up was already completed including abdominal CT Scan. Scan showed irregular density mass in the stomach. On further enquiry, mother informed that child used chew mother hair in infancy followed by chewing and swallowing of fur from stuffed toys which she is continuing to do now. Diagnosis of tricobezoar was made. Surgical extraction of the mass was done with uneventful recovery.

**CT scan showing mass involving the Stomach and Duodenum**

**Discussion:**
Bezoars are compact masses formed of various indigestible foreign or intrinsic substances found in the gastrointestinal tract of human and animals. The term bezoar, is believed to be derived from the Arabic ‘Badzehr’, Persian ‘Padzahr’ or Turkish word ‘Panzehir’, all meaning counter poison or an antidote. In fact bezoars were used in India from 1200 B.C. for many reason including rejuvenating to neutralizing snake venom.

Bezoars are found mostly in the stomach. But there are reports of cases with bezoars in the intestine, esophagus, colon and even in Meckel’s diverticulum. Occasionally the tail of the bezoar may extend to jejunum (Rapunzel syndrome). They occur mainly in the young women who chew and swallow their hair (trichobezoar) or phytobezoar (vegetable fibres) or pharmacobezoar (tablets/semi solid masses of drugs). Cotton threads swallowed by a tailor was reported to form a bezoar. Initially these do not cause problem and continue to grow and become enmeshed, creating a mass in the shape of the stomach where they are usually found. Causes of bezoar include the presence of indigestible material in the lumen, gastric dysmotility (including previous surgery like vagotomy and partial gastrectomy etc.) and certain other substances that encourage stickiness and concretion formation.

Trichobezoars usually presents with pain in the abdomen, nausea, vomiting, anorexia, dyspepsia, malaise, weakness, loss of weight, and a sense of heaviness in the epigastrium. Pain is mainly in the epigastrium, mimicking peptic ulcer pain, having recurrent acute exacerbations. The most characteristic physical finding is a large, readily, palpable and freely movable abdominal mass, usually located in the epigastrium but sometimes occupying lower positions, with a well-defined, smooth outer surface and uniform firmness. Phytobezoars in the intestine usually presents with acute intestinal obstruction. A lump is sometimes palpable that may disappear and reappear. The incidence of associated peptic ulceration with the more abrasive phytobezoars (24%) is greater than with trichobezoars (10%). Bezoar may cause ulceration, hemorrhage, perforation and peritonitis. Presence of typical mass in the epigastrium with typical history is quite diagnostic and do not need much investigations.

Treatment of bezoars is relief of obstruction by removal of bezoars. Rarely resection of intestinal loop may be required for gangrenous or other pathological changes. Multiple enterotomies is recommended for bezoars extraction in Rapunzel syndrome. In cases of intestinal bezoars stomach and proximal gut must be checked for concomitant bezoars. Surgical treatment of gastric bezoars may be avoided when small. Following the introduction of minimally invasive surgery and endoscopy
with mechanical and laser fragmentation techniques, successful management of bezoars has been recorded. Procedures involve fragmentation of the mass by scissors, or by ultrasound. Dissolution of phytobezoar by Coca cola lavage was reported recently.

References:
2. DeBakey M, Oschner A. Bezoars and concretions, comprehensive review of literature with analysis of 303 collected cases and presentation of 8 additional cases. Surgery. 1939;5:132–160.
7. Ladas S D; Triantafyllou K; Tzathas C; Tassios P; Rokkas T and Raptis S A. Gastric phytobezoars may be treated by nasogastric Coca-Cola lavage. European Journal of Gastroenterology & Hepatology: 2002 ; 14 : 7 : 801-803.
A 40-year-old previously healthy housewife presented with fever for 1 months and swelling of the lower lip for 15 days. Initially her lower lip became swollen and after 7 days it became ulcerated without any pain (fig-1). Clinical examination revealed she was febrile with swollen, ulcerated, crusted lower lip. Her upper lip and mouth cavity were absolutely normal. Other clinical examinations were unremarkable.

A 14-year-old previously healthy school boy presented with fever for 6 weeks and gradual protrusion of the both eyes for 20 days. Clinical examination revealed he had fever, bony tenderness, purpura and bilateral proptosis (fig-2). He had no eye pain, chemosis or congestion. Thyroid gland was normal.

In both cases investigations revealed they had acute myeloid leukemia (AML) with possible deposition of leukemic cells (blast) in lip and retro-bulbar tissue respectively. In AML, malignant clones of immature myeloid cells (primarily blasts) proliferate, replace bone marrow, circulate in blood and invade other tissues.\(^1,2\) Leukemic cells may infiltrate any extra-medullary site occurring in approximately 3% of patients with AML.\(^1,2\)

References:

---
a. Dr. Md. Mahmudur Rahman Siddiqui, FCPS (Med) Part-II Course student, Dept. of Medicine, DMCH, Dhaka.
b. Prof. Quazi Tarikul Islam, Professor, Dept. of Medicine, DMCH, Dhaka.
c. Dr. Ahmed Hossain, Assistant Professor, Dept. of Medicine, DMCH, Dhaka.
d. Dr. Md. Shahriar Mahbub, FCPS (Med) Part-II Course student, Dept. of Medicine, DMCH, Dhaka.
LETTER TO THE EDITOR


1. To the Editor-in-Chief: We have gone through the time-demanding editorial on ‘Cost Effective Preoperative Evaluation’ with keen interest. We would like to supplement few relevant data of study performed in our centre. Assessing and optimising a patient before surgery is an essential for planning and administering a successful peri-operative management with the best possible outcome. Peri-operative morbidity, mortality and thereby cost increase with the severity of pre-existing diseases. We studied a total of 2,086 patients in CMH Dhaka, who were scheduled for routine surgery. During pre-anaesthetic assessment we tried to detect the pre-existing systemic diseases which were not diagnosed earlier. The incidental findings of diseases were: conduction heart block 18.75%, COPD 15%, anaemia 11.62%, IHD 5.55%, bronchial asthma 1.61%, hypertension 1.3% and some other conditions like drug allergy, CRF, and peptic ulcer disease.2

This report depicts that the patients with incidental findings were fortunate enough to come across a functioning anaesthesia OPD setup and they got the scopes to be optimised for the planned procedures before hand. But this is the scenario of quite a thin section of in vogue anaesthesia practice in our country. The author has very correctly mentioned that ‘the practice of seeing patients preoperatively by an anaesthesiologist just before surgery still exists in this part of the world and yet a fair number make their way to OR without being seeing at all’. This custom is mainly prevailing in private practice and requires improvement particularly for the patients with co-morbidity to have desired safety and cost effectiveness. The advised investigations should also be rational and logical ones following the guidelines to reduce the procedural expenditures.3 This can be achieved by integrated and concerted efforts of the health care continuum of family practitioners, internists, residents, surgeons, pathologists and anaesthesiologists.

References:

Dr. (Lt Col) Md Rabiul Alam
Classified Anaesthesiologist
CMH, Chittagong Cantonment, Chittagong. Email: rabiuldr@gmail.com

2. Sir
Thank You for publishing a well informed journal. I thoroughly gone through May 2010 Vo. 28, No. 2. About Editorial of this issue I want to mention that its a time honoured publication and it may be a guideline in all the institute where Anaesthesia is being practiced as an speciality. Its nice to see Anesthesia grade has been matched with Surgery grades and rewrite the importance of ASA score. I demand well circulation of this editorial among those who use anesthesia as an speciality.

With thanks

DR. Abul Bashar Md. Jamal
FCPS (Surgery), FRCS (Edin), MMEd Asst. Prof. of Surgery Shaheed Suhrawardy Medical College, Dhaka.

Author’s Reply for both letters

We do not have enough study backup in this country to say with some assurance about the incidence of incidental co-morbidity during preoperative assessment. Dr. Alam’s series is quite a pioneer in this area. He is right that a great but unknown number of surgical patients do not meet the anaesthesiologist before the day of surgery albeit this responsibility lies with both the Surgeons and Anaesthesiologists.

Regarding the correlation of comorbidity and increase in expenses as Dr. Alam mentioned, I think the guideline
laid down by various work groups can act as optimizer. Dr. Jamal also mentions about an integral approach consisting of relevant disciplines. This, I believe ought to be a product of team work and the job to be done in phases. The first person to start the ball to roll is the surgeon and then with collaboration of the anesthesiologists other clinicians and investigative departments could get involved.

Kazi Mesbahuddin Iqbal


To the editor in chief: At first I thank to the editor for starting some new section like ‘letter to the editor’ and short communication. I have gone through the report and I would like to give some comments about Toxic encephalopathy. Toxic encephalopathy, also known as toxic-metabolic encephalopathy, is a degenerative neurologic disorder caused by exposure to toxic substances. It can be an acute or chronic disorder. Toxic encephalopathy has a wide variety of symptoms, which can include memory loss, small personality changes, lack of concentration, involuntary movements, nausea, fatigue, seizures and depression. Toxic encephalopathy may be caused by prolonged exposure to toxic elements including solvents, drugs, radiation, paints, industrial chemicals, and certain metals. In addition, chemicals, such as lead, that could instigate toxic encephalopathy are sometimes found in everyday products such as cleaning products, building materials, pesticides, air fresheners, and even perfumes. Different kinds of lesions, which lack specificity for toxic injury, can be observe on radiological images, but deep grey matter lesions with symmetrical distribution through out basal ganglia are most often seen. However, such findings have also been reported after anoxic-ischemic insults or during severe metabolic disturbances. Lesions in the white matter may also be present in the case of acute exposure to toxic agents. The true prognostic value of toxic-induced brain changes in the acute phase in CT or MR studies is unclear, although serial MRI may add new information or molecular imaging techniques such as the MR diffusion –weighted imaging or MR spectroscopy. MR imaging with diffusion and perfusion imaging provides information regarding brain lesions induced by the toxic agents (vasogenic edema, cytotoxic edema, infarction, hemorrhage, demyelination). Treatment is mainly for the symptoms that toxic encephalopathy brings upon victims, varying depending on how severe the case is. To reduce or halt seizures, anticonvulsants may be prescribed. Dialysis or organ replacement surgery may be needed in some severe cases. Toxic encephalopathy is often irreversible. If the source of the problem is treated, by removing the toxic chemical from the system, further damage can be prevented, but prolonged exposure to toxic chemicals can quickly destroy the brain. Research is being done by organizations such as NINDS (National Institute of Neurological Disorders and Stroke) on what substances can cause encephalopathy, why they do this, and eventually how to protect, treat, and cure the brain from this condition. It is increasing day by day in our country due to ignorance, illiteracy, poverty & illegal practice of different substances by local traditional healer. I thank to author to highlight the case and image which will make awareness among medical practitioner about toxic encephalopathy.

References:
1. “Neurotoxicity Syndromes”. Medical Subject Headings. United States National Library of Medicine. 1999-11-03. h t t p : / / w w w . n l m . n i h . g o v / c g i / m e s h / 2 0 0 9 / M B _ e g i ? m o d e = & i n d e x = 1 8 8 0 3 . Retrieved 2009-03-30.
2. “What is Encephalopathy?”. Disorders A-Z. National Institute of Neurological Disorders and Stroke. 2007-02-12. h t t p : / / w w w . n i n d s . n i h . g o v / d i s o r d e r s / e n c e p h a l o p a t h y / encephalopathy.htm#What_is. Retrieved 2009-03-30.
3. Fi d l e r A T , B a k e r E L , L e t z R E . “Neurobehavioural effects of occupational exposure to organic solvents among construction painters”. O c c u p a t i o n a l a n d E n v i r o n m e n t a l M e d i c i n e M a y 1 9 8 7 ; 4 4 ( 5 ) : 2 9 2 – 3 0 8 . doi:10.1136/oem.44.5.292. h t t p : / / o e m . b m j . c o m / c g i / r e p r i n t / 4 4 / 5 / 2 9 2 . Retrieved 2009-04-26.
4. “National Toxic Encephalopathy Foundation”. h t t p : / / n a t i o n a l - t o x i c - e n c e p h a l o p a t h y - f o u n d a t i o n . o r g . Retrieved 2009-03-30.
Dr. Aparna Das
Assistant Professor,
Department of Medicine
Dhaka Medical College, Dhaka.

Author’s Reply:
We pleased to see the keen interest of Dr. Aparna Das regarding the article “Images in Medical Practice: Short Communication of JBCPS, May 2010;28(2):128”.1 We appreciate the opportunity to respond. In my short communication I wanted to highlight the changes that occur in the CT scan and MRI of brain of a toxic encephalopathy patient. In the short communication, there were little scope of detailed discussion on various expects of toxic encephalopathy but I must appreciate and thank you for your letter highlighting the etiology, clinical presentation, diagnostic approach and treatment of toxic encephalopathy.2 I gladly accept the additional information you have provided. It was gratifying to read the response from the reader.

References:

Dr. Md. Mahmudur Rahman Siddiqui
FCPS Med Part-II course student,
Department of Medicine, Dhaka Medical College, Dhaka.
COLLEGE NEWS

(J Bangladesh Coll Phys Surg 2010; 28: 206-211)

Examination news:

Result of FCPS Part-I, FCPS Part-II and MCPS examinations held in July 2010 are given below:

3686 candidates appeared in FCPS Part-I examination held in July 2010 of which 675 candidates come out successful, subject wise result are as follows:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Subject</th>
<th>Appeared</th>
<th>Pass</th>
<th>% of Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medicine</td>
<td>1124</td>
<td>275</td>
<td>24.47</td>
</tr>
<tr>
<td>2</td>
<td>Surgery</td>
<td>539</td>
<td>61</td>
<td>11.32</td>
</tr>
<tr>
<td>3</td>
<td>Paediatrics</td>
<td>405</td>
<td>56</td>
<td>13.83</td>
</tr>
<tr>
<td>4</td>
<td>Obst. &amp; Gynae</td>
<td>880</td>
<td>160</td>
<td>18.18</td>
</tr>
<tr>
<td>5</td>
<td>Otolaryngology</td>
<td>98</td>
<td>14</td>
<td>14.29</td>
</tr>
<tr>
<td>6</td>
<td>Ophthalmology</td>
<td>91</td>
<td>24</td>
<td>26.37</td>
</tr>
<tr>
<td>7</td>
<td>Psychiatry</td>
<td>9</td>
<td>1</td>
<td>11.11</td>
</tr>
<tr>
<td>8</td>
<td>Anaesthesiology</td>
<td>74</td>
<td>7</td>
<td>9.46</td>
</tr>
<tr>
<td>9</td>
<td>Radiology</td>
<td>52</td>
<td>4</td>
<td>7.69</td>
</tr>
<tr>
<td>10</td>
<td>Radiotherapy</td>
<td>20</td>
<td>4</td>
<td>20.00</td>
</tr>
<tr>
<td>11</td>
<td>Dermatology and Venereology</td>
<td>67</td>
<td>6</td>
<td>8.96</td>
</tr>
<tr>
<td>12</td>
<td>Physical Medicine &amp; Rehabilitation</td>
<td>26</td>
<td>5</td>
<td>19.23</td>
</tr>
<tr>
<td>13</td>
<td>Dentistry</td>
<td>251</td>
<td>52</td>
<td>20.72</td>
</tr>
<tr>
<td>14</td>
<td>Family Medicine</td>
<td>3</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>15</td>
<td>Haematology</td>
<td>22</td>
<td>2</td>
<td>9.09</td>
</tr>
<tr>
<td>16</td>
<td>Microbiology</td>
<td>7</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>17</td>
<td>Histopathology</td>
<td>18</td>
<td>4</td>
<td>22.22</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Total</strong></td>
<td><strong>3686</strong></td>
<td><strong>675</strong></td>
<td><strong>18.31</strong></td>
</tr>
</tbody>
</table>

The following candidates satisfied the Board of Examiners and are declared to have passed the FCPS Examinations held in July 2010 subject to confirmation by the council of Bangladesh College of Physicians and Surgeons.
<table>
<thead>
<tr>
<th>Roll No.</th>
<th>Name</th>
<th>From where Graduated</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>077-7072</td>
<td>Ashiqur Rahman Khan</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7074</td>
<td>Ariful Basher</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7075</td>
<td>Dr. Abul Mansur Mohammad Rezaul Karim</td>
<td>Comilla Medical College, Comilla</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7091</td>
<td>Dr. Hafez Mohammad Nazmul Alhsan</td>
<td>Rajshahi Medical College, Rajshahi</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7100</td>
<td>Dr. Md Mokarram Hossain</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7111</td>
<td>Dr. Md. Shahidullah</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7142</td>
<td>Iqbal Ahmed Chowdhury</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7161</td>
<td>Dr. Shaikh Md. Eunus Ali</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7188</td>
<td>Dr. Mohammad Ashaduzzaman</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7195</td>
<td>Mohammed Shahjahan Kabir</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7223</td>
<td>Mohammad Akter Hossain</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7229</td>
<td>Md. Zakirul Islam</td>
<td>Rajshahi Medical College, Rajshahi</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7239</td>
<td>Md. Naushad Ali</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7263</td>
<td>Md Shafiul Alam</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7288</td>
<td>Nusrat Sultana</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7289</td>
<td>Noor Mohammed</td>
<td>Institute of Applied Health Science, under USTC, Chittagong</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7300</td>
<td>Muhammad Kamruzzaman Khokan</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7304</td>
<td>Mst Irin Pervin</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7307</td>
<td>Dr. Md. Moyeen Uddin</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7312</td>
<td>Dr. Md. Abdur Rouf</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7338</td>
<td>Dr. Joyabrata Das</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7349</td>
<td>Sudip Ranjan Deb</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7357</td>
<td>Zeenat Sultana</td>
<td>Bangladesh Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7362</td>
<td>Shikha Paul</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-7368</td>
<td>Ayesha Siddika Purabi</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7389</td>
<td>Alifa Nasrin</td>
<td>Jalalabad Ragib-Rabeya Medical College, Sylhet</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7403</td>
<td>Dr. Zebun Nessa</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7406</td>
<td>Dr. Umme Kulsam</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7414</td>
<td>Dr. Sushmita Paul</td>
<td>Rajshahi Medical College, Rajshahi</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7415</td>
<td>Dr. Shamsunnahar</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7421</td>
<td>Dr. Shahela Nazneen</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7422</td>
<td>Dr. Shahanaj Sharmin</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7423</td>
<td>Dr. Seema Bhattacharjee</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7431</td>
<td>Dr. Sabina Sharmeer</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7434</td>
<td>Dr. Rina Haider</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7441</td>
<td>Dr. Parveen Sultana</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7449</td>
<td>Dr. Najnin Munni</td>
<td>Moulana Bhasani Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7455</td>
<td>Dr. Most.Sabina Yeasmin</td>
<td>Rajshahi Medical College, Rajshahi</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7466</td>
<td>Dr. Lailo Nahar</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7471</td>
<td>Dr. Kamrun-Nesa-Begum</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7473</td>
<td>Quazi Mah-Zebeen Akter</td>
<td>Faridpur Medical College, Faridpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7485</td>
<td>Naznin Akter Zahan</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7495</td>
<td>Nazia Ahmed</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7497</td>
<td>Nasrin Hossain</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7506</td>
<td>Nargis Akther Shiddique</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7542</td>
<td>Khirunneessa</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>Roll No.</td>
<td>Name</td>
<td>From where Graduated</td>
<td>Subject</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------</td>
<td>----------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>077-7556</td>
<td>Shahnaz Neelanjana Rahman</td>
<td>Bangladesh Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7564</td>
<td>Shah Mohammad Hassanur Rahman</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7578</td>
<td>Sadia Jabeeb Khan</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7618</td>
<td>Shraboni Chakraborty</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7624</td>
<td>Kazi Nazma Begum</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7629</td>
<td>Kaniz Fatema</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7634</td>
<td>Jinnat Ara Islam</td>
<td>Rajshahi Medical College, Rajshahi</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7674</td>
<td>Farhana Rahman</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7675</td>
<td>Farhana Rahman</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7678</td>
<td>Dr. Jebunnessa Begum</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7694</td>
<td>Monowara Begum</td>
<td>Comilla Medical College, Comilla</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7699</td>
<td>Mohshina Abedin</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7721</td>
<td>Sohely Akter</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7728</td>
<td>Suraiya Parvin</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7735</td>
<td>Toufiqua Ahmed</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7736</td>
<td>Threshika Islam Chowdhury</td>
<td>Z.H. Shikder Women’s Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7742</td>
<td>Tania Afroz</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7746</td>
<td>Yeasmin Samad Lipe</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7747</td>
<td>Ummul Nusrat Zahan</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7759</td>
<td>Tahmina Akhter</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7760</td>
<td>Tahmina Ahmed</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-7768</td>
<td>Zahida Jabbar</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>077-7771</td>
<td>Shahnaz Begum</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>077-7773</td>
<td>Rajasheer Das</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>077-7775</td>
<td>Muhammed Moniruzzaman</td>
<td>Khulna Medical College, Khulna</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>077-7787</td>
<td>Md. Azizur Rahman</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>077-7789</td>
<td>Md Kamrul Hasan Khan</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>077-7793</td>
<td>Maliha Sharmin</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>077-7802</td>
<td>Mahmuda Akhter</td>
<td>Dhaka Dental College, Dhaka</td>
<td>Oral and Maxillofacial Surgery</td>
</tr>
<tr>
<td>077-7803</td>
<td>Shoma Banik</td>
<td>Pioneer Dental College, Dhaka</td>
<td>Oral and Maxillofacial Surgery</td>
</tr>
<tr>
<td>077-7804</td>
<td>Nitish Krishna Das</td>
<td>Dhaka Dental College, Dhaka</td>
<td>Oral and Maxillofacial Surgery</td>
</tr>
<tr>
<td>077-7805</td>
<td>Manjur-E-Mahmud</td>
<td>Dhaka Dental College, Dhaka</td>
<td>Oral and Maxillofacial Surgery</td>
</tr>
<tr>
<td>077-7807</td>
<td>Ahmed Tariq</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>077-7811</td>
<td>Salah Uddin Ahmmed</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>077-7812</td>
<td>S. M. Nazmul Huque</td>
<td>Khulna Medical College, Khulna</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>077-7814</td>
<td>Nripendra Nath Biswas</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>077-7819</td>
<td>Mohammad Kamal Hossain</td>
<td>Jahurul Islam Medical College, Bajitpur</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>077-7820</td>
<td>Mohammad Arif Murshed Khan</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>077-7821</td>
<td>Mohammad Abdul Quayum</td>
<td>Comilla Medical College, Comilla</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>077-7825</td>
<td>Kazi Atikuzzaman</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>077-7832</td>
<td>Dr. Md. Golam Mustafa</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>077-7841</td>
<td>Subrata Ghosh</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Otolaryngology</td>
</tr>
<tr>
<td>077-7851</td>
<td>Somayra Nasreen</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-7886</td>
<td>Samia Amin</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-7898</td>
<td>Naharuna Aive Hyder Chowdhury</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-7928</td>
<td>Mamun Reza Khan</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>Roll No.</td>
<td>Name</td>
<td>From where Graduated</td>
<td>Subject</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------</td>
<td>---------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>077-7932</td>
<td>Jesmin Hossain</td>
<td>Rajshahi Medical College, Rajshahi</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-7936</td>
<td>Habiba Jesmin</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-7943</td>
<td>Farhana Rahat</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-7944</td>
<td>Farhana Naznin</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-7958</td>
<td>Shahnaz Akter</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-7970</td>
<td>Dr. Nandita Nazma</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-7972</td>
<td>Dr. Mrinal Kanti Das</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-7991</td>
<td>Badrunnesa Ahmed</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Physical Medicine &amp; Rehabilitation</td>
</tr>
<tr>
<td>077-7992</td>
<td>Mohammad Abdul Kalam Azad</td>
<td>Comilla Medical College, Comilla</td>
<td>Physical Medicine &amp; Rehabilitation</td>
</tr>
<tr>
<td>077-7993</td>
<td>Muhammed Abdullah Al Mamun</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Physical Medicine &amp; Rehabilitation</td>
</tr>
<tr>
<td>077-7994</td>
<td>Nadia Rahman</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Physical Medicine &amp; Rehabilitation</td>
</tr>
<tr>
<td>077-7995</td>
<td>Shaful Karim Md Elias</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Physical Medicine &amp; Rehabilitation</td>
</tr>
<tr>
<td>077-7997</td>
<td>Farzana Khan Shoma</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Physical Medicine &amp; Rehabilitation</td>
</tr>
<tr>
<td>077-8001</td>
<td>Rubaba Ahmed</td>
<td>Dhaka Dental College, Dhaka</td>
<td>Prosthodontics</td>
</tr>
<tr>
<td>077-8003</td>
<td>Muhammad Zillur Rahman Khan</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>077-8004</td>
<td>Muhammad Abdul Kayum Shaikh</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>077-8005</td>
<td>Mekhala Sarkar</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>077-8029</td>
<td>Dr. Hashim Rabbi</td>
<td>Bangladesh Medical College, Dhaka</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8031</td>
<td>Dr. Hamudur Rahman</td>
<td>Jahurul Islam Medical College, Bajitpur</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8037</td>
<td>Dr. Abu Bakar Siddique</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8038</td>
<td>Dr. Abdul Rabban Talukder</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8040</td>
<td>Debasish Das</td>
<td>Khulna Medical College, Khulna</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8046</td>
<td>Dr. Md Abdul Mobin Choudhury</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8051</td>
<td>S M Nuruddin Abu Al Baki</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8057</td>
<td>Prabir Chowdhury</td>
<td>Institute of Applied Health Science, under USTC, Chittagong</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8077</td>
<td>Mohammad Zillur Rahman</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8141</td>
<td>Md Abdul Baset</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8146</td>
<td>Md Nazmul Hoque Masum</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8161</td>
<td>Khandaker A B M Abdullah Al Hasan</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8164</td>
<td>Kazi Taslima Ahmed</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8166</td>
<td>Jahir Ahmed</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8178</td>
<td>Shantanu Biswas</td>
<td>Shahid Ziaur Rahman Medical College, Bogra</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8180</td>
<td>Farhad Uddin Ahmed</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8184</td>
<td>Dr. Tamanna Narmeen</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8186</td>
<td>Dr. Syed Khalid Hasan</td>
<td>Institute of Applied Health Science, under USTC, Chittagong</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8189</td>
<td>Dr. Mehtab Uddin Ahmed</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8195</td>
<td>Dr. Md. Shariful Alam Khan</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8209</td>
<td>Dr. Md. Shahiduzzaman</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8227</td>
<td>Be-Nazir Barna</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8232</td>
<td>Angel Shubhagata Baidya</td>
<td>Jalalabad Ragib-Rabeya Medical College, Sylhet</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8233</td>
<td>Dizen Chandra Barman</td>
<td>Rajshahi Medical College, Rajshahi</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-8253</td>
<td>Tariq Akhter Khan</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Surgery</td>
</tr>
</tbody>
</table>
The following candidates satisfied the Board of Examiners and are declared to have passed the MCPS Examinations held in July 2010 subject to confirmation by the council of Bangladesh College of Physicians and Surgeons.

<table>
<thead>
<tr>
<th>Roll No.</th>
<th>Name</th>
<th>From where Graduated</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>077-9005</td>
<td>Md. Ghulam Haider</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Anaesthesiology</td>
</tr>
<tr>
<td>077-9006</td>
<td>Mohammad Jahangir Alam</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Anaesthesiology</td>
</tr>
<tr>
<td>077-9008</td>
<td>Lipika Sanjowal</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Anaesthesiology</td>
</tr>
<tr>
<td>077-9009</td>
<td>Muhammad Abdur Rahman</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Anaesthesiology</td>
</tr>
<tr>
<td>077-9011</td>
<td>Md Zahedul Islam</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Anaesthesiology</td>
</tr>
<tr>
<td>077-9012</td>
<td>Muhammed Saiful Islam</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Anaesthesiology</td>
</tr>
<tr>
<td>077-9014</td>
<td>Mohd Iqbal Kabir</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Anaesthesiology</td>
</tr>
<tr>
<td>077-9017</td>
<td>Rahat Anjum</td>
<td>Jalalabad Ragib-Rabeya Medical College, Sylhet</td>
<td>Clinical Pathology</td>
</tr>
<tr>
<td>077-9019</td>
<td>Mohammad Shameem Montasir Hossen</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Clinical Pathology</td>
</tr>
<tr>
<td>077-9020</td>
<td>Towhid Tofail</td>
<td>Sappro Dental College, Dhaka</td>
<td>Dental Surgery</td>
</tr>
<tr>
<td>077-9021</td>
<td>Mohammad Deedarul Alam</td>
<td>Dhaka Dental College, Dhaka</td>
<td>Dental Surgery</td>
</tr>
<tr>
<td>077-9023</td>
<td>Ranjit Ghosh</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Dental Surgery</td>
</tr>
<tr>
<td>077-9026</td>
<td>Ashis Kumar Biswas</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Dental Surgery</td>
</tr>
<tr>
<td>077-9030</td>
<td>Aminul Islam</td>
<td>Dhaka Dental College, Dhaka</td>
<td>Dental Surgery</td>
</tr>
<tr>
<td>077-9033</td>
<td>Shantaj Khondoker</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Dermatology and Venereology</td>
</tr>
<tr>
<td>077-9034</td>
<td>Farhana Wahab</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Dermatology and Venereology</td>
</tr>
<tr>
<td>077-9035</td>
<td>Pragwa Permita</td>
<td>Jahural Islam Medical College, Bajitpur</td>
<td>Dermatology and Venereology</td>
</tr>
<tr>
<td>077-9036</td>
<td>Noor Jahan Begum</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Dermatology and Venereology</td>
</tr>
<tr>
<td>077-9040</td>
<td>Md Khasroo Bhuiyann</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Family Medicine</td>
</tr>
<tr>
<td>077-9041</td>
<td>Syed Akm Nurul Amin</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Family Medicine</td>
</tr>
<tr>
<td>077-9045</td>
<td>Sumon Mutssuddy</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Forensic Medicine</td>
</tr>
<tr>
<td>077-9078</td>
<td>Jinmat Fatema Saira Safa</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-9079</td>
<td>Tufayel Ahmed Chowdhury</td>
<td>Faridpur Medical College, Faridpur</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-9116</td>
<td>Poly Sengupta</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-9119</td>
<td>Muhammed Muhiuddin Mazumder</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-9130</td>
<td>Mohammad Ashif Rahman</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-9144</td>
<td>Dr. Abu Saif Mohammad Lutful Kabir</td>
<td>Chittagong Medical College, Chittagong</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-9149</td>
<td>Dr. Md. Abul Kashem</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Medicine</td>
</tr>
<tr>
<td>077-9160</td>
<td>Dr. Most. Arifa Sharmin</td>
<td>Dinajpur Medical College, Dinajpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9162</td>
<td>Dr. Hosney Naznin</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>Roll No.</td>
<td>Name</td>
<td>From where Graduated</td>
<td>Subject</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------</td>
<td>-------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>077-9172</td>
<td>Dr. Delu.Ara.Parveen</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9178</td>
<td>Rehana Ferdoesh</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9183</td>
<td>Sarbin Boby Sultana</td>
<td>Faridpur Medical College, Faridpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9188</td>
<td>Shahin Afrose</td>
<td>Rajshahi Medical College, Rajshahi</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9197</td>
<td>Jannatul Hosna</td>
<td>Medical College for Women and Hospital, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9210</td>
<td>Nasrin Hasan</td>
<td>Jahurul Islam Medical College, Bajitpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9216</td>
<td>Md Shahidul Islam</td>
<td>Sher-E-Bangla Medical College, Barisal</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9242</td>
<td>Samira Chowdhury</td>
<td>University of Science &amp; Technology Chittagong</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9243</td>
<td>Anuradha Chakravartty</td>
<td>Jahurul Islam Medical College, Bajitpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9244</td>
<td>Mosammath Nazma Begum</td>
<td>Dinajpur Medical College, Dinajpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9245</td>
<td>Mst Umma Salma Chowdhury</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9261</td>
<td>Sampa Rani Kundu</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9263</td>
<td>Shamima Haque</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9272</td>
<td>Most Salma Akhtar Zahan</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Obst and Gynae</td>
</tr>
<tr>
<td>077-9286</td>
<td>Nihar Ranjan Roy</td>
<td>Rangpur Medical College, Rangpur</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>077-9296</td>
<td>Dr. Mohammad Altaf Hossain</td>
<td>MAG Osmani Medical College, Sylhet</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>077-9302</td>
<td>Farhana Rahman</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-9335</td>
<td>Md Zahidul Hasan</td>
<td>Khulna Medical College, Khulna</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-9347</td>
<td>Dr. Sarbari Saha</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Paediatrics</td>
</tr>
<tr>
<td>077-9349</td>
<td>Md Shahedul Islam</td>
<td>Shahid Ziaur Rahman Medical College, Bogra</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>077-9351</td>
<td>A K M Sharifur Rahman</td>
<td>Sir Salimullah Medical College, Dhaka</td>
<td>Radiology &amp; Imaging</td>
</tr>
<tr>
<td>077-9387</td>
<td>Muhammed Alam</td>
<td>Mymensing Medical College, Mymensing</td>
<td>Surgery</td>
</tr>
<tr>
<td>077-9389</td>
<td>S M Eqbal Hossain</td>
<td>Dhaka Medical College, Dhaka</td>
<td>Surgery</td>
</tr>
</tbody>
</table>
The editorial board meeting was held on 30th August, 2010 and chaired by Professor AKM Mahbubur Rahman. Decision taken by the Reference Committee of BCPS has been endorsed that from January, 2011 instead of 3 issues of journal, 4 issues will be published (Jan/ April/ July/ Oct) in each year.

This peer-reviewed journal is a valuable collection of different articles in all disciplines so that healthcare professionals, researchers can find important medical information. Our all new section started from the last two issues are already much appreciated by the fellows. We have got tremendous support from home and abroad. We are receiving many articles in our new editorial mail address (journal.bcps@gmail.com) from many countries around the world. We are trying to disseminate the journal to many different web sites and data bases. Already the journal is indexed in the following data bases (HINARI, DOAJ, Google Scholar, Index Copernicus, ProQuest, CrossRef, Ulrichsweb, EBSCO, BanglaJOL, AsiaJOL) and waiting for many others.

We are eagerly waiting for your valuable advice and new articles. Hope to give more new information and further development in the coming days. Best wishes for all the fellows.

Prof. Quazi Tarikul Islam
Editor-in-Chief
JBCPS.
NAME OF THE REVIEWER OF ARTICLES IN THIS ISSUE

(J Bangladesh Coll Phys Surg 2010; 28: 213)

Professor Md. Sanawar Hossain & Dr. A.B.M. Golam Rabbani
Professor Farhana Dewan & Professor Tahmina Begum
Professor Faruq Ahmed & Professor Parveen Shahida Akhter
Professor Faisal Kabir & Professor (Brig. Gen.) Zuberul Islam Chowdhury
Professor Sultana Razia Begum & Professor A.K.M. Anowarul Azim
Professor A S M A Raihan & Professor Faruqe Ahmed
Professor Aftab Uddin, Dr. Abdul Wadud Chowdhury & Dr. Fazilatunnessa Malik
Professor Fatema Begum & Dr. Nazneen Akhter Banu
Professor Md. Abdul Hayee & Dr. Narayan Chandra Kundu
Dr. Md. Shafiqul Islam & Dr. Md. Musharaf Hossain
The following Fellows who died between January to May 2010.

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of Death</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Chowdhury Humayun Kabir</td>
<td>8 June, 2010</td>
<td>Awarded honorary fellowship in surgery in 2004, worked as Professor Head, Department of Surgery, and Honourary Secretary of BMSRI and Chairman, Uttara Adhunik Medical College.</td>
</tr>
<tr>
<td>Dr. Md. Taibur Rahman</td>
<td>19 June, 2010</td>
<td>Passed fellowship examination in Surgery in July 1991, died in road traffic accident. Before his death, he was Associate Professor at Dinajpur Medical College.</td>
</tr>
<tr>
<td>Dr. Md. Yusuf Ali</td>
<td>19 June, 2010</td>
<td>Passed fellowship examination in Surgery in January 1994, died in road traffic accident. Before his death, he was Associate Professor at Dinajpur Medical College.</td>
</tr>
<tr>
<td>Dr. Uttam Kumar Singha Baul</td>
<td>24 September, 2010</td>
<td>Passed fellowship examination in Otolaryngology in July 2006, died in road traffic accident. Before his death, he was working as RS (ENT) at Rajshahi Medical College Hospital.</td>
</tr>
</tbody>
</table>