

Celebrating 40th Foundation Day of United Group



United Group, one of the largest business conglomerates of the country, celebrated its 40th Foundation Day on 12 July 2017. The group is committed to socio-economic development of the country by continuously enhancing value of its stakeholders and striving to be a socially responsible corporate entity by supporting community engagement activities.

In his inspiring speech, the Group

Chairman Mr Hasan Mahmood Raja shared the aspiration that United Group nurtures to take the company forward in the coming days and he urged every employee to uphold this goal in a homogenous way from every corner; each employee working as an ambassador of United Group. He emphasized on maintaining a conducive working atmosphere with family bonding between everyone; he further stressed upon the need to be dedicated in

demonstrating social responsibility in the pursuit of nation building endeavors.

On this occasion, the Board of Directors conveyed in their message the immense value that they give to their human resource & stakeholders being the driving force of the company; they expressed their pledge to create higher opportunities for enhancing their contribution and growth in the days to come.

Editor's Note

In the 3rd quarter of the year, we had moments of pride being pioneer in country-first life-saving procedures like TAVI, we also had busy interactive learning participatory in-house & outreach engagement sessions from all level of hospital staff to Consultants in different local & international programs. The articles in this quarter display varied cases truly depicting the multi specialty clinical treatment atmosphere of United Hospital. Our deepest sympathy goes to the flood affected community of the country and we further appreciate the individual & collective effort of hospital staff for helping them.

Commemoration of 11th Anniversary of United Hospital

On 24 August 2017, United Hospital touched the milestone of completing 11 years of healthcare service. The day was observed solemnly with raising of the hospital flag at dawn followed by Quran Khani and special prayers for the recovery and good health of all the patients in general and for those of the hospital. A day long complimentary basic health checkup booth was organised at hospital lobby which was inaugurated by Mr Faridur Rahman Khan, Managing Director of United Hospital,

who reminded all to be cautious in delivering responsible services to the patients as United Hospital with its growing age, needs to meet growing expectations of the society. CEO, departmental chiefs, Consultants, nurses and others of the hospital were also present in the booth where a good number of patients and their attendants availed complimentary health checkup, doctor consultation and diet counseling. Special menu lunch was arranged for all hospital staff on the day.



Acute Anteroseptal ST Segment Elevation Myocardial Infarction: A Misnomer

Professor H I Lutfur Rahman Khan, Professor Abdul Wadud Chowdhury, Dr N A M Momenuzzaman, Dr Kaiser Nasrullah Khan, Dr Fatema Begum, Dr Tunaggina Afrin Khan

"The term anteroseptal STEMI neither implies that the ischemic process is limited to the anteroseptal segments, nor that the size of the ischemic area at risk is smaller than that in patients with extensive anterior STEMI."

Post myocardial infarction (MI) short and long term clinical outcome is largely determined by the size of the infarcted area. It is generally assumed that as the lead involvement in electrocardiography (ECG) is less in anteroseptal ST segment elevation myocardial infarction (AS-STEMI), where ST segment elevation (STE) is limited to leads V1 to V3, myocardial damage is likely to be less; and in extensive anterior STEMI (EA-STEMI), as the STE extends further upto V6, the myocardial damage is likely to be more. This study was intended to compare regional wall motion abnormality (RWMA) between acute anteroseptal STEMI and acute extensive anterior STEMI patients.

This cross sectional analytical study was carried out in Dhaka Medical College Hospital; 90 patients with AS-STEMI and 106 patients with EA-STEMI, admitted in between October 2012 and September 2013, were included. For each patient, a transthoracic echocardiogram (TTE) was performed within 24-48 hours of MI and was interpreted by an independent investigator blinded to the patient's ECG data. The left ventricle was divided into 17 segments (6 basal, 6 mid-ventricular, 5 apical). Comparison of RWMA between the two groups for each of the 17 segments was done. Global wall motion abnormality was compared between the groups on the basis of ejection fraction (EF%).

No differences were observed between the two groups in baseline characteristics; except AS-STEMI group had more patients with diabetes and EA-STEMI group had more patients with family history of coronary artery disease.

Comparison of mean of total involved segments and ejection fraction between two groups (n=196)

Total involved segments	Groups		
	Group I (n=90)	Group II (n=106)	P (95% CI)
Mean \pm SD	8.83 \pm 2.49	9.01 \pm 2.25	0.604 ^{NS} (.492 to .498)
Ejection fraction	Groups		
	Group I (n=90)	Group II (n=106)	P (95% CI)
Mean \pm SD	38.8 \pm 5.78	39.21 \pm 5.90	0.627 ^{NS} 2.059 to 1.245)

Group I (AS-STEMI), Group II (EA-STEMI), P value derived from Student t test. ^{NS} = not significant,

In conclusion the term AS-STEMI may be a misnomer, as it implies that only the anteroseptal segments of the left ventricle are involved. This study shows that regional dysfunction in patients with AS-STEMI extends beyond the anteroseptal region.

- | | | | |
|------------------------|-----------------------|---------------------|---|
| 1. Basal Anterior | 7. Mid Anterior | 13. Apical Anterior | ■ LAD |
| 2. Basal Anteroseptal | 8. Mid Anteroseptal | 14. Apical Septal | ■ RCA |
| 3. Basal Inferoseptal | 9. Mid Inferoseptal | 15. Apical Inferior | ■ LAD or RCA |
| 4. Basal Inferior | 10. Mid Inferior | 16. Apical Lateral | ■ LCX or LAD |
| 5. Basal Inferolateral | 11. Mid Inferolateral | 17. Apex | ■ LCX or RCA |
| 6. Basal Anterolateral | 12. Mid Anterolateral | | ■ LAD or RCA or LCX |



17 segment model of left ventricle with respective coronary circulation.

Scientific Seminars on PET CT

Like last quarter, United Hospital organized Scientific Seminars on PET CT in different institutions of Dhaka to disseminate the updated status & role of PET CT to diagnose different types of cancer and the role that United Hospital is playing. Dr M A Wahab, Consultant, Nuclear Medicine Department of United Hospital delivered presentation in these sessions.

Date	Institute	Topics
23 July 2017	National Institute of Diseases of the Chest & Hospital (NIDCH)	Molecular Imaging in Lung Cancer
25 July 2017	Uttara Adhunik Medical College	A Surprise for Cancer Imaging
12 August 2017	BIRDEM	Wonderful Imaging Modality for Oncology
16 August 2017	Ahsania Mission Cancer & General Hospital	Molecular Imaging in Lung Cancer
23 August 2017	Dhaka Medical College Hospital	Impact of PET CT in Management of Colorectal Cancer



United Hospital Cardiac Centre conducted country's first ever Transcatheter Aortic Valve Implant (TAVI), a minimally invasive non-surgical procedure



On 25 July 2017, first time in Bangladesh, the excellent team effort of Chief Cardiologist Dr Momenuzzaman and Chief Cardiac Surgeon Dr Jahangir Kabir, led to a successful TAVI procedure on Dr Sayeedur Rahman, a 85year old renowned Dental Surgeon of Barisal, who was suffering from age related Aortic Stenosis; this was declared in a press conference in the hospital to newspaper and TV reporters. As a person gets old, calcium deposit increases in heart valve and heart valve movement ability goes down. Since Aortic Valve is a high-pressure valve (under huge blood flow pressure), as its performance gets diminished, patient

starts having symptoms of chest pain, fainting episodes and unbearable increasing cough. It is a deadly disease because these patients are in high mortality risk i.e. when they come to doctors with active symptoms, they mostly survive for another 2-5 years after that. The only remedy is aortic heart valve replacement, which can be done by open heart surgery, but patients at old age with many other complications like kidney insufficiency, lung problem or block in heart vessels, might be at severe risk of surgery and anaesthesia. Hence for such patients, Transcatheter Aortic Valve Implantation

(TAVI) is a risk-free life-saver procedure done with simple sedation and local anaesthesia in 50-55 minutes. With Open Heart Surgery Aortic Valve Replacement patient needs to stay in hospital for atleast 7-10 days, whereas with TAVI done in Cath Lab, patient can go home in 2-3 days and can resume normal day to day activities in 4-5 days. With increase in life expectancy and increase in incidences of age-related diseases, TAVI can save lives in Aortic Stenosis thereby can play an important role in keeping country's these intellectual senior citizens productive.



Secondary Spontaneous Pneumothorax: A Case Report

Dr Jahangir Talukder, Dr Safia Binte Rabbani

Pneumothorax is defined as collection of air in pleural space. Tension pneumothorax is a medical emergency where modified water seal drainage needs to be given on emergency basis initially. Other treatment options are percutaneous needle aspiration, intercostal tube drainage (ICT) and pleurodesis in case of recurrent pneumothorax. After management of pneumothorax, later actual cause of pneumothorax should be treated such as rupture of tuberculous cavity which is common in our country and should be treated with antitubercular therapy.

A male patient of 55 years was admitted in United Hospital with history of breathlessness and dry cough for 4 days. He was a smoker and a known case of hypertension and chronic obstructive pulmonary disease. Besides, he gave history of pulmonary tuberculosis and treatment with antitubercular drugs 20 years back.

On admission, he was having dyspnoea, his pulse was 120/min and blood pressure was 190/120 mm Hg,

SpO₂ was 80% in room air. Physical examination of respiratory system revealed hyper-resonant percussion note and silent chest on auscultation of right side. No abnormality was detected in other systems. Chest X-ray showed hyper-translucent right lung field with sharply defined compressed lung margin suggestive of right sided pneumothorax. In view of above the patient was diagnosed as a case of moderately large secondary spontaneous pneumothorax of right side. Since the patient was symptomatic so immediate intercostal tube (ICT) insertion was done to bring out the entrapped air from right pleural space. Patient's right lung was fully expanded after ICT insertion. Unfortunately because of patient's movement, ICT got displaced and patient developed surgical emphysema. Air bubble was found to be present even at the end of 7th day of ICT drainage. Patient was advised to undergo bronchopleural fistulectomy by thoracic surgeon as this turned out to be a case of open pneumothorax.

During discharge, patient was advised not to air travel for next 6 months as recurrence may occur within 6 months even after thoracic surgery.



Initial CT scan of chest showing: right sided pneumothorax



After insertion of intercostal drainage tube there was full expansion of right lung with small pneumothorax after 7 days, suggesting open pneumothorax

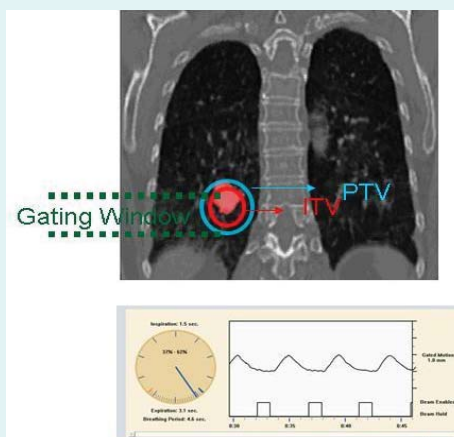
A Preliminary Evaluation of Respiratory Gated Volumetric Modulated Arc Therapy in The True Beam Linear Accelerator – A Dosimetric Study

Karthick Raj Mani, Anisuzzaman Bhuiyan, Ramaa Lingaiah, Faruk Hossain, Anamul Haque

Volumetric Modulated Arc Therapy (VMAT) replaced a standard form of Intensity Modulated Radiotherapy treatment (IMRT) in most of the health care set-up due to its superior dose distribution with reduced treatment time and monitor unit. Intra fraction organ motion during the treatment delivery is one of the major concerns. In this study we tried to evaluate the accuracy of dose delivery with respiratory gated VMAT.

Five previously treated patients (2 Hepatocellular Carcinoma HCC and 3 Lung cancer) were included in this study to evaluate accuracy of the gated VMAT dose delivery. All the patients were simulated with retrospective 4DCT. Entire respiratory cycle was divided into 10 bins or CT datasets (ie. 0,10,20,30,40,50,60,70,80 & 90). The MIP (Maximum Intensity Pixel), AIP (Average Intensity Pixel) and MIN (Minimum Intensity Pixel) were created from the deep inspiration period (i.e. 90, 0 & 10). All the patients were planned to

deliver VMAT delivery with 6MV FFF beam using gated and non-gated technique. A dosimetric comparison was made between the gated and non-gated delivery using ion chamber matrix and absolute dosimetry was also performed to evaluate the delivery accuracy.



For regular sinusoidal motion, the dose delivered to the target was not

substantially affected by the gating windows when evaluated with the gamma statistics, suggesting the interplay effect has a small role in respiratory-gated RapidArc therapy. Varied results were seen when gated therapy was performed on the patient plans that could only be attributed to differences in patient respiratory patterns. Patients whose plans had the largest percentage of pixels failing the gamma statistics exhibited irregular breathing patterns including substantial inter patient variation in depth of respiration.

Regular sinusoidal wave forms using phantom results were within acceptable limits. Gamma evaluation using Imatrix with 3% & 3mm criteria passed >97pixel and the absolute dosimetry were within $\pm 2\%$ for all the patients. These results were encouraging and gave us confidence that our planned and delivered fluencies were within the acceptable clinical limit.

Zika: A new threat to Newborn Health

Dr Nargis Ara Begum, Dr Sharmin Afroze

In the past two decades, many important vector-borne diseases have re-emerged and spread to newer parts of the world. Zika virus is one of them, which was first isolated in 1947 from a monkey in the Zika forest, Uganda; since then sporadic cases were reported worldwide. In 2015, 84 countries and territories reported evidence of vector-borne Zika virus transmission. Other than mosquito bite it can be transmitted from mother to fetus during pregnancy or around the time of birth. Affected individuals suffer from fever, rash, joint pain and red eyes. Usually disease severity is mild and resolves spontaneously within few days to weeks. Intrauterine Zika virus infection causes miscarriage and early neonatal death, fetal microcephaly, fetal malformations and neurological disorders, cerebral calcification, ocular abnormalities like loss of foveal reflex, macular neuro-retinal atrophy



(diagnosed in three children in January, 2016) and Guillain-Barré syndrome (later in life). WHO declared the cluster of microcephaly cases and other neurological disorders associated with Zika infection a public health emergency of international concern (PHEIC) on 1 Feb, 2016. Since then the Government of Bangladesh has been addressing the iceberg of the problem and has already taken some initiatives for Zika preparedness in our country. Prevalence of the vector Aedes Aegypti mosquito in Bangladesh, adds more to the

risk of its spread. The IEDCR (Institute of Epidemiology, Disease Control and Research) has identified Zika from previous stored samples and has developed national strategy for Zika viral disease identification. Training has also been given for health care personnel along with finalization of case definition of Zika related microcephaly. Along with this on-going training progress in Zika identification among health workers, awareness should be increased among common people as well. For preventing Zika related microcephaly and other malformations of newborn we also have to ensure and strengthen regular antenatal care, examine all infants with microcephaly for proper evaluation of the cause and to enroll birth defect cases in the national birth defect surveillance system to observe the trend of these birth defects, identify and notify these to avoid disease outbreak.

Prevalence of RH-HDN (Haemolytic Disease of Newborn)

Dr Md Redwanul Huq Masum, Prof Brig Gen (Retd) Zahid Mahmud

Haemolytic disease of newborn (HDN) results from fetomaternal blood group incompatibility, most often in ABO and Rh blood group and rarely in other minor blood group systems. The pregnant mother develops an antibody against fetal red cell antigens that crosses the placenta and causes destruction of fetal red cells. HDN due to ABO incompatibility are common, mild and passes on unnoticed in majority of the cases. HDN due to Rh incompatibility, mainly Rh D, are often severe and causes clinical problems.

Rh-HDN has the following characteristics:

- In the majority of the cases, the mother is of blood group 'O' Rh D -ve and the fetus is of blood group A, B or AB Rh D +ve.
- It does not usually occur in first pregnancy. The chance of fetal HDN increases with successive pregnancies

Prevalence of Rh HDN in United Hospital in the last 05 years (April, 2012 – March, 2017) is shown in the following table (Table 1):

Total no of Rh antibody tests done in UHL lab in last 5 years	Detection of Rh antibody No. (%)	Rh antibody titer	Severity of HDN
217	3 (1.38)	1:4	Mild
		1:8	Mild
		1:64	Severe

While worldwide data are not available, the percentage of presence of Rh antibody in D-negative women alloimmunised following a D-positive pregnancy in USA in 1960s & 1970s (1) is shown in the following table (Table 2):

Year	Presence of Rh antibody (%)
1960s	14
1970s	1-2

It is obvious from the above mentioned data that the prevalence of the presence of Rh antibody in D-negative women alloimmunised following a D-positive pregnancy resulting in HDN in subsequent pregnancies has decreased greatly in last few decades.

Possible reasons for decreased prevalence of HDN are:

- Introduction of routine antenatal anti-D prophylaxis (RAADP):
- For Rh negative mothers who have not developed antibodies yet, there are currently two ways of receiving RAADP-
- 1) a one-dose treatment: where pregnant women receive an injection of immunoglobulin at some point during 28 to 30 weeks of their pregnancy
 - 2) A two-dose treatment: where pregnant women receive two injections; one during the 28th week and the other during the 34th week of pregnancy.
- Injection of Anti-D immunoglobulin within 72 hours of child birth, if the mother is RhD negative and the baby is RhD positive, and the mother hasn't already been sensitized
 - Decreased number of children reduces the prevalence of HDN, as the risk of HDN increases with subsequent pregnancies
 - Increased awareness, e.g. preferring caesarean section than normal vaginal delivery result in decreased chance of transmission of fetal red blood cells into mother's circulation

Antenatal checkup for Rh negative mothers having anti-D antibodies (Rh alloimmunized women):

- Anti-D antibody titers are typically performed monthly until 24 weeks of gestation, after which period titers should be repeated every 2 weeks.
- Pregnancies in which antibody titers are 1:8 or lower can be managed by serial monitoring of maternal antibody titers.
- If the titer is 1:16 or higher, fetal wellness assessment is compulsory by ultrasonography to evaluate middle cerebral artery peak systolic velocity (MCA-PSV) or serial amniocentesis for delta OD450 (a bilirubin derivative) if the former is not available.
- Spectrophotometric analysis of amniotic fluid bilirubin derivative can be performed to detect the presence of fetal HDN and its severity. The amount of delta OD450 in amniotic fluid samples can be used to estimate the degree of fetal haemolysis.
- When fetal haematocrit is less than 30%, detected in fetal blood sampling, the only therapeutic option is intrauterine fetal transfusion.

World Breast Feeding Week 2017

On 1 August 2017, the inaugural ceremony of World Breast Feeding (WBF) week 2017 was held at Osmani Milonayoton organized by BFF, HPNSDP, WHO, WABA & other NGOs with the theme Sustaining Breast Feeding Together. Health Minister Mr Md Nasim was the chief guest of the inauguration program where Dr Runa Laila, Neonatology Specialist, Dr Halima Akhtar, Obs & Gynae Specialist and Nurses Ms Lovely Thigidi & Ms Subasiny Mardy from United Hospital

attended. Breast feeding promotes the wellbeing of infant, mother & the entire country. Since 1992, World Breast Feeding week has been observed in Bangladesh every first week of August. To achieve the WBF week theme, it is essential to work together to support breast feeding programs & policies so that future generations grow into healthy strong citizens.



Purchase & Procurement Department of United Hospital

United Hospital's Purchase Department is responsible for the management of the hospital's procurement process which includes acquisition, distribution, control & disposal of goods and thereafter providing relevant services and equipment necessary to support the activities of the hospital.

Acting as the agent of the hospital in all matters pertaining to purchase and procurement, the department requires special knowledge along with high degree of integrity to obtain

The basic purchase objective is to ensure the most optimum goods, supplies, capital items and services are procured at the lowest possible price. The practice of competitive bidding whether formal sealed bids (proposals) or informal (quotations), not only ensures reasonable price but also guards against favoritism and fraudulence. All purchases are made by the respective purchase wings or through emergency purchase orders, issued in advance to concerned departments who justify a need to the Head of

The Purchase Department is divided into five units: General Purchase, Medical Purchase, Medicine Purchase, Food & Beverage Purchase and Commercial unit. The procurement methodology used by the first four units is briefly outlined below:

1. Requisition: Any user department of the hospital can prepare a requisition for goods and services through proper departmental approval authority and send it to store, using the Hospital Integrated System, according to the type of goods. The



"The right product"
 "In the right quantity"
 "At the right price"
 "At the right time"

Purchase department needs to actively and continuously participate in searching ideas from manufacturers and circulating suggestions among supply sources in the pursuit of achieving cost savings, product improvement and/or process improvement.

The Purchase & Procurement Department of United Hospital negotiates contracts for medical supplies, food, clothing and linen, office supplies and transport equipment such as ambulances. It's a complex job that requires constant supervision to ensure appropriate goods are purchased and adequate inventory levels are maintained.

Purchase department. An approved purchase order is required prior to the purchase of any goods, capital items, services, supplies and construction items.

To avoid fraudulence, wastage and misuse, all concerned staff and procurement officials scrupulously and spontaneously follow, enforce and ensure full compliance with the ethics & regulations of United Hospital. It is the policy of United Hospital that all properly approved and competitively priced purchase requisitions are processed in a timely fashion, resulting in accurate payment through the accounts payable department.

store will forward it to the purchase department.

2. Sourcing: After receiving the purchase requisition, the product is identified as per user satisfaction along with brand, origin and suitable price. Then the purchase requisition is approved.



3. Vendor Selection:

For regular goods all vendors are pre-shortlisted by the purchase department. They must be licensed to the extent as required by law. It is the responsibility of this department to verify compliance and the vendor is considered pre-qualified provided no adverse information is identified by United Hospital.

4. Quotation/Price Offer: After requisition is approved, quotation/price offer is collected from vendors minimum of three wherever possible. Quotations must be in letterhead/ official pad and contain detailed specification of product mentioning the manufacturer's name, origin, pack size, price & price validity etc. Contact person's name with phone number is also mandatory in quotation/price offer.

The purchase policies and procedures of United Hospital promote strong internal controls to ensure that only those goods and services approved for purchase are charged accurately to specific accounts and meet the requirements/ standards of the user department.

5. Emergency Purchase: An emergency purchase is defined as the purchase of commodities or services, regardless of amount, where the purchase is made as a result of a sudden and /or unforeseen demand. The requesting department must notify the purchase department of the nature of the need for the emergency purchase.



The commercial unit deals with banking & shipping aspects of items that are imported directly by the hospital to meet its diversified requirements. Commercial personnel are familiar with CNF Agents and have knowledge of all rules and regulations of Customs and the National Board of Revenue which enable them to do their work smoothly.

Capital Equipment is defined as equipment with an acquisition cost of BDT 10,000 (ten thousand) or more and a useful life of at least one year. Both requirements must be met in order for a product to be considered as capital equipment.

The Purchase department maintains close working relationship with the accounts department and provide all assistance with regard to submission of bills & documents and any other information/ work that may be required to complete the post-purchase steps.

Where appropriate, issuance of business to competing vendors via separate purchase order is done. The competitive process allows for multiple contract awards provided all vendors agree to adhere to the hospital purchase policy and meet the specific requirements of the user department. In some cases, quotations are taken for a fixed period and contract awards are

given for a fixed period with an option to renew for a specified period depending on market price fluctuation.

Occasionally, vendors offer to have their equipment used on a trial basis in order to determine its usefulness to a department. When presented with this opportunity, the purchase department tries to take advantage of such option. Once the terms have been agreed upon, the department uses the equipment for the specified period of time. At the end of the trial period, the equipment is returned to the vendor at no cost to United Hospital. During selection of equipment the purchase department reviews the reputation, reliability, capability, experience as well as expertise of the vendor/ supplier; availability of goods and services as per hospital demand; availability of replacement parts and technical assistance; warranties offered by the supplier which may include service and repair by the supplier; delivery period and cost etc.

The department continuously tries to ensure that the patients of the hospital are provided with the best possible products in a safe environment at a cost-effective price.



Scar Endometriosis - A Dilemma

Dr Nighat Ara, Dr Naseem Mahmud, Dr Nusrat Zaman

A 35 years old female presented with a painful lump on lateral aspect of a pfannenstiell incision 10 months after caesarean section. Abdominal examination revealed a firm tender lump with history of gradual increase in size of 3x3 cm with no discharge. USG revealed a bright heteroechoic mass followed by MRI revealed extension on external oblique aponeurosis and also onto muscle wall. It showed endometrial glands and stromal cells confirming two findings of the pathological triad of endometriosis. FNAC was done. The scar initially was thought to be a scar granuloma and treated conservatively. However, as the lump persisted getting enlarged in size, surgical intervention was done with wide excision of the lump under general anaesthesia.

In pathology, fibro adipose tissue with interspersed gland and stroma reinforced the findings of FNAC thus confirming the diagnosis of Endometriosis.

Scar Endometriosis (SE) i.e. Incision Endometriosis is a rare condition; though growing prevalence of gynaecological and obstetric surgeries has made it an issue to concern. In general, estimated 89 millions women of reproductive age group have been affected with this worldwide. The prevalence of surgical Endometriosis is about 1.6%; yet posing significant clinical importance specially with increasing hysterectomy and caesarean section, contributing 1.08 - 2% and 0.03 - 0.4% respectively.



Hypertrophied Scar

Endometriotic Scar

The aetiology attribute to the direct implantation of decidual cells during various gynaecological and obstetric surgeries, which subsequently proliferate or induce metaplasia in the surrounding cells under the influence of oestrogen.

Diagnosis of SE is always challenging as it may appear after an interval of 3 months to 10 years of the primary surgery.

Commonest sites being abdominal skin and subcutaneous tissues through rectus sheath is hardly involved. Symptoms often mimic common surgical complications like appearance of painful lump in or around the surgical scar, but in SE the lump remains persistently enlarged in size or exhibits unsightly, discolored hypertrophic scar which is severely tender on palpation. Cyclicity of symptoms during menstruation like classical endometriosis is not always among the findings.

To establish SE presence of 2 out of 3 criteria of pathological Triad (Endometrial gland, Stromal cells, haemosiderin laden macrophages) need to be present along with the symptoms.

Often the lesion appears to be a firm nodule; FNAC becomes the first choice of diagnostic tool which gives a full histological picture that helps differentiating it from metastatic disease like desmoid tumor, lipoma, sarcoma, fasciitis, hematoma, abscess and fat necrosis. Imaging modalities like USG, CT or MRI has some use but not specific.

MRI is much preferred than CT due to its high special resolution, MRI detects planes between muscles and subcutaneous tissues. It magnifies the extensions of affected tissues thus helps planning operative resection especially recurrent and large lesions.

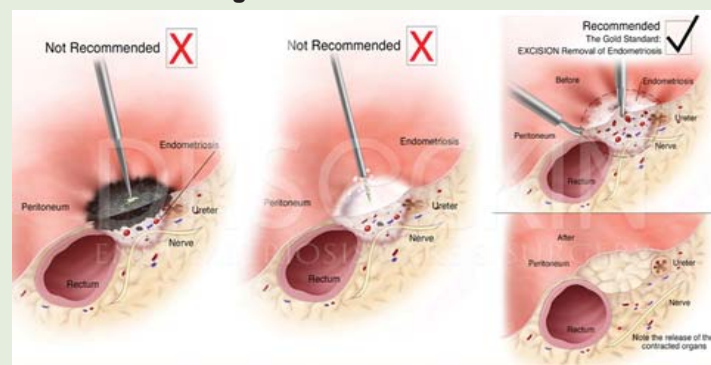
The only treatment modality is Wide Surgical Excision of the lesion of 1cm range on all sides and patch grafting of the fascial defects.

It has been reported that medical treatment with OCP and progesterone and gonadotrophin agonist (Leuprolide acetate) has been in use but provides only prompt improvement in symptoms which recur on withdrawal of the treatment. Follow up, is of great importance as chances of recurrence is high which requires re-excision. Malignant change is very rare but continual recurrence imposes a threat, so possibility needs to be ruled out.



Surgical Excision Removal of Endometriosis

Gold Standard Surgical Excision Removal of Endometriosis



Good technique and proper care during gynaecological and obstetric surgeries help preventing Scar Endometriosis. Thorough cleaning and vigorous irrigation with saline before closure in extensive abdominal procedures is highly recommended. Overall good surgical and gynaecological knowledge and efficient examination helps better preventive and prognostic care.

Workshop on Antimicrobial Consumption Monitoring

Md Anisur Rahman, In-charge United Hospital Pharmacy, attended a two day long workshop on 9 & 10 August 2017 on Antimicrobial Consumption Monitoring, organized jointly by Directorate of Drug Administration & WHO, which was chaired by Director General Maj Gen Mostafizur Rahman. With representatives of WHO & FAO, in total 60 doctors, pharmacists & other healthcare professionals, participated here to study the WHO survey on current antimicrobial use trend and resistance pattern with a view to develop a national program on antimicrobial usage & surveillance.

Anterior Cervical Decompression and Fusion without Fixation: A Retrospective Study

Dr S S Ahmed, Dr Al Imran, Dr Sourav Chowdhury, Dr Saif Ul Haque

This specific study aimed to assess the functional and radiological outcomes of patients with Anterior Cervical Discectomy and Fusion (ACDF) with cage alone without screw and plate fixation for cervical disc prolapse (degenerative or traumatic, without instability) causing cervical myelopathy and/or radiculopathy at single or multiple levels (maximum of four).



In this study patients with cervical degenerative or traumatic disc disease (without instability) from September 2007 to June 2016 were assessed retrospectively. A total of 66 patients were treated in United Hospital by ACD and Fusion with cage (Titanium/PEEK/ Combined) at single or multiple level of cervical disc disease during this period. All the patients who underwent ACD and

Fusion with cage alone were assessed in consideration of radiological and clinical outcomes. Robinson's criteria, and posterior neck pain, arm pain described by a 10 point visual analog scale (VAS) and Neck Disability Index (NDI). EQ-5D Questionnaire for overall functional status was used to assess clinical outcomes. Subsidence, rate of fusion, Kyphotic angle and the degenerative changes in adjacent segments were examined during follow-up examination.

VAS was checked during each follow-up for all patients and Robinson's criteria, NDI and EQ-5D Questionnaire were used. Fusion rates were 98.48% (65/66); subsidence rates were 6.06% (4/66), local and regional Kyphotic angle difference showed no significant disparity (pre and post-operative). At the final follow-up,



adjacent level disease developed in 7.57% (5/66) cases.

In single or multiple levels ACD and Fusion with cage alone would be a better choice than additional screw and plate fixation with regard to clinical and radiological outcome. The same surgeon used plate and screw routinely for single and multiple levels previously and follow up of those patients revealed significant neck movement restriction and subsequent development of further disease at levels above and below. However, without plate and screw there is not much complaint regarding movement, and follow up revealed no further disc prolapse at levels above and below, up to five years since operation.

In conclusion, single or multiple level ACD and Fusion with cage alone does not require fixation by plate and screw and definitely improves the functional quality of life of the patient and prevent subsequent complications associated with plate and screw fixation. We suggest that only fusion without fixation will yield better postoperative functional outcomes compared to those undergoing fusion with fixation.

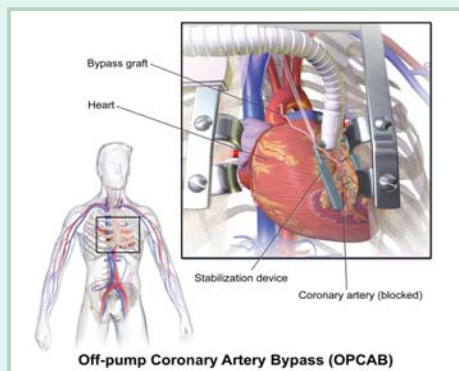
Impact of Renal Insufficiency on In-hospital Outcomes after Off-pump Coronary Artery Bypass Surgery

Dr Sonjoy Biswas, Dr Syed Al-Nahian, Dr Saydur Rahman Khan, Dr Jahangir Kabir

Chronic kidney disease (CKD) is a predictor of increased morbidity and mortality in patients undergoing off-pump coronary artery bypass surgery (OPCAB). This retrospective study was conducted to evaluate the characteristics and predictors of increased morbidity and mortality in the CKD population, who have undergone OPCAB and to compare in-hospital outcomes between patients with and without CKD and with and without development of acute kidney injury (AKI).

A prospective analysis was done of all isolated OPCAB performed at United Hospital from January 2015 to October 2016. CKD was considered when e-GFR was $< 90 \text{ ml/min/1.73m}^2$. Clinical characteristics, mortality and post-operative complications were evaluated according to renal function and stages of CKD.

Out of 1463 patients, 169 (11.6%) had CKD, this population was older, presented greater prevalence of hypertension, left ventricular dysfunction, prior stroke, peripheral vascular disease



and triple vessel disease, hence higher Euro SCORE. In-hospital outcomes revealed greater incidence of stroke

(4.4% vs 1.6%), atrial fibrillation (12% vs 6%), low cardiac output syndrome (12% vs 7.2%), longer stay in intensive care unit (4.84 vs 2.83 days) and greater mortality (8.4% vs 2.4%). Female gender, smoking, diabetes and peripheral vascular disease were associated with higher in-hospital post-operative complications and mortality within the CKD group. Patients who did not develop post-operative AKI presented 2.4% mortality; non-dialytic AKI and dialytic AKI presented 16.7% and 33.3% mortality respectively. Mortality was directly related to the stages of CKD.

In conclusion it can be said that, CKD patients submitted to OPCAB represent a high risk population, with increased incidence of complications and mortality; further post-operative AKI is a strong in-hospital mortality predictor.

Corporate Agreement Signing and Facility Tour

United Hospital Limited signed Corporate Medical Services Agreement with the following companies in this quarter:



- Chartered Life Insurance Company Limited
- Embassy of China in Bangladesh
- Asian Paints (BD) Limited
- World Vision Bangladesh
- Healix International, UK

The officials from following companies / organisations visited United Hospital in this quarter.

- British High Commission, Dhaka on 07 August 2017
- British High Commission, Dhaka & Healix International, UK on 13 August 2017
- International SOS, Singapore on 19 September 2017
- US Embassy, Dhaka on 26 September 2017

Health Awareness Talk as CSR Activity



Awareness session on Let's Talk About Healthy Diet was organized on 16 July 2017 at Unilever (BD) Limited Corporate Office, conducted by Ms Chowdhury Tasneem Hasin, In-Charge, Dietetics & Nutrition Department.

Four awareness sessions on Chikungunya & Its Management were organized on 24 & 26 July and 10 & 14 August 2017 at the corporate offices of Aukotex Group, Nitel Niloy Group, Factory of Aukotex Group and SGS (BD) Limited respectively. First three sessions were conducted by Dr Shamshad Khan, Specialist, Internal Medicine Department and the last one by Dr Zeenat Sultana, Junior Consultant, Internal Medicine Department.



Hepatitis Awareness Campaign at East West University

Risk and spread of different types of Hepatitis being prevalent among University students, a daylong awareness campaign was conducted by United Hospital at East West University campus on 20 September 2017 where basic health

checkup booth was set-up in their Academic Bhaban, letting their students and faculties avail complimentary health checkup & doctor consultation; this was coupled with an awareness talk delivery on Hepatitis risks & prevention at their Central Auditorium by Dr Shamshad Khan, Specialist of Internal Medicine Department. Enthusiastic students, faculties & other University staff, who thronged in the booth browsing through the flyers, brochures and festoons of United Hospital demonstrated their interactive spontaneity in this Hepatitis awareness drive.



Scientific Seminars

Date & Venue	Programme Title	Speakers	Remarks
27 July '17 United Hospital Seminar Hall	Chronic Viral Hepatitis & Its Management	Dr Mohammed Mahbub Alam, Consultant, Gastroenterology & Hepatology Dr Fowaz Hussain Consultant, Gastroenterology & Hepatology	In commemoration of World Hepatitis Day
21 August '17 United Hospital Seminar Hall	Capsule Endoscopy	Dr Dhakshitha Wickramasinghe University of Colombo	To mark launching of Pillicam Capsule Endoscopy
22 August '17 Conference Room Khulna Medical College	Recent Advances in Clinical Practice of Oncology and Nephrology	Dr Md Rashid Un Nabi Consultant, Radiation Oncology Dr Tanveer Bin Latif Consultant, Nephrology	Jointly organized with Teacher's Association, Khulna Medical College



Participation in International Conferences



Nephrology Chief Consultant Prof Mujibul Haque Mollah attended the 11th International Congress of International Society for Hemodialysis (ISHD) in Thailand from 2 to 5 August 2017 along with 2000 participants from all over the world.

Along with 25000 other participants Dr Ferdous Shahriar Sayed, Medical Oncology Consultant attended the Annual Conference of ESMO (European Society of Medical Oncology) held at Madrid, Spain from 7 to 11 September 2017; this is the second largest conference after the annual ASCO (American Society of Clinical Oncology) meeting in USA.



Endocrinology Consultant Dr Nazmul Islam attended the 53rd annual meeting of European Society for Advancement of Diabetes in Lisbon, Portugal from 11 to 15 September 2017, along with 10000 diabetes experts from all over the world.

On 7 & 8 July 2017, Dr Sharif Ahmed, Specialist & Coordinator of Cancer Care Center did a poster presentation on observational study titled Rivaroxaban Compared To Low Molecular Heparin For Preventing Weight Malignancy Associated Venous Thromboembolic Event & Its Compliance in a conference at Best of ASCO (American Society of Clinical Oncology) Asia 2017 in Singapore.



Dr Kaisar Nasrullah Khan, Consultant Cardiology attended a Weekly Fellowship Course on Rovus (ROTA, IVUS & FFR) from 31 July to 4 August 2017 at Tokyo University, Tokyo, Japan. A total of 8 participants attended the course including 5 from Bangladesh.



Cardiology Specialists Dr Tunaggina Afrin Khan and Dr Samsun Nahar attended Malaysia Live annual conference on interventional cardiology from 27-29 August 2017 in Hotel Hilton, Kuala Lumpur. They exchanged views in the session and explored different aspects of difficult and complicated cases of interventional cardiology.

Training & Workshop



Indian Association for Parenteral & Enteral Nutrition (IAPEN) organised a workshop on Critical Care Nutrition on 11 September 2017 where ICU Intensivist Dr Mir Atiqur Rahman, In-Charge Dietetics and Nutrition Department Ms Chowdhury Tasneem Hasin and Dietitian Ms Fatima Gazi from United Hospital participated.



Along with 28 doctors from different hospitals, United Hospital Oncology Specialist Dr Sharif Ahmed attended National Training Program on Contouring of GI and CNS Cancer arranged by IAEA (International Atomic Energy Agency), BAEC (Bangladesh Atomic Energy Commission) & Oncology Club from 10 to 14 September 2017 at INMAS Auditorium, Dhaka Medical College.



United Hospital Neonatology Specialist Dr Sharmin Afroze and Senior House Officer Dr Md Toyobur Rahaman presented United Hospital newborn care service practices in the 2 day progress review meeting of NBB (Newborn Birth Defect) held in Bangabandhu Sheikh Mujib Medical University Dhaka on 23 to 24 July 2017.



Along with 27 participants from all around the country Sharifun Nahar, Radiotherapy Technologist of United Hospital attended a 5 day training program on Radiation Protection for Radiation Workers and RCOs of BAEC Medical Facilities and Industries, held from 20 to 24 August 2017, arranged by Bangladesh Atomic Energy Commission (BAEC).

New Consultants



Dr. Raqibul M. Anwar

MBBS, LRCP, (Edin), LRCS (Edin), LRCPS (Glasg)
MA, MSc, FRCS (Glasg), FRCS (England)
FRCS (Intercollegiate Gen Surgery)

**Department of General, Laparoscopic and
Colorectal Surgery**



Prof. Dr. Touhida Ahsan

MBBS, FCPS (Obs & Gynae), MS (Obs & Gynae)

Department of Obs & Gynae

World Heart Day Observance



World Heart Day takes place on 29 September each year. This year theme of World Heart Day was Share the Power. United Hospital commemorated the event like every year with a range of activities. Health Checkup Booth at lobby was inaugurated by CEO Mr Najmul Hasan and Cardiac Centre Consultants, where regular health check, complimentary doctor consultancy and diet counseling by the dieticians were given, Awareness sessions on Heart Health were conducted in different corporate companies along with offering special Cardiac Packages for the patients and their attendants.

World Physiotherapy Day Observance



World Physiotherapy Day is observed globally on 8 September; the day being Friday this year, it was celebrated in United Hospital on 9 September 2017 in a befitting manner upholding the theme Physical Activity For Life. The programme was festive with cake cutting and gracious presence of Consultant and senior management of the hospital. Physical Medicine & Rehabilitation Consultant Dr Lt Colonel S M Shahidul Haque, and Neurosurgery Consultant Dr Syed Sayed Ahmed, emphasized on the essential role of physiotherapy in enhancing the services provided to the patients.

Congratulations to the Newly Weds on their Marriage



- Senior Staff Nurse Mst Kakoli Khatun of Emergency Department got married to Md Shahriar Hasan on 1 July 2017
- Senior Staff Nurse Gitashri Mondol of 3rd Floor Oncology Ward got married to Shamanuj Roy on 3 July 2017
- Physiotherapist Horain Akter (Disha) got married to Syed Nadeem Ahsan on 7 July 2017
- Appointment Call Center Officer Md Mainul Islam got married to Mourin Farahit on 28 July 2017
- Customer Relation Officer Mahfujur Rahman Chowdhury got married to Mariam Akhter on 2 August 2017
- Housekeeping Attendant Md Salaudinn got married to Jannatul Maowa on 4 September 2017
- Customer Relation Officer Md Shafiul Azam Hiru got married to Jannat Ara Shifa on 5 September 2017
- Customer Relation Officer Kazi Azharul Islam got married to Marjana Jannat Mira on 26 September 2017

Congratulations & Best Wishes to the following Staff and their Spouses



- Junior Nurse Nirupoma Rozario of Haemodialysis Unit was blessed with a daughter Namrota Rozario on 5 April 2017
- Senior Staff Nurse Sharmin Akter of 5th W/A, 1st Desk was blessed with a son Shamiul Hasan Alif on 26 April 2017
- Dr Jan Mohammad, Consultant Radiology & Imaging was blessed with a daughter Areeba Waniya on 2 July 2017
- Duty Manager Sabbir Ahmed of Admin Department was blessed with a daughter Junaira Jannat on 5 July 2017
- Nursing Unit Supervisor Smriti Mondol of GHU was blessed with a son Rehan on 17 July 2017
- Support Staff Md Abbas Ali of Admin Department was blessed with a son Sadman Ahmad on 13 August 2017
- Senior Staff Nurse Anju Mondol of Pre-Cath Ward was blessed with a daughter Tonoya Mondol on 17 August 2017
- Senior Staff Nurse Karuna Rangsa of Neuro Ward was blessed with a daughter Sangita Rangsa 18 August 2017
- Senior Staff Nurse Mst Fatema Khatun of Pre-Cath Ward was blessed with a daughter Faria Islam Rifa on 19 August 2017
- Duty Manager Matiar Rahman of Admin Department was blessed with a daughter Marium Rahman on 27 August 2017
- Blood Bank Specialist Dr Md Mizanur Rahman Chowdhury was blessed with a son Nuraz on 14 September 2017

Condolence & Prayers

- Coordinator, Clinical Support Dr Khandaker Abdul Asad passed away on 12 July 2017
- Medical Oncology Consultant Dr Ashim Kumar Sengupta lost his daughter Adrija Sengupta on 26 July 2017