

Editor's Note

With this edition "reflection" completes its third year of successful publication. We congratulate and thank all those who have made this possible through providing articles and valuable time and effort during each issue.

We are proud of our students of Post Basic BSc course of United College of Nursing who have shown tremendous achievement and grabbed 6 of the top 10 positions in the merit list. Our doctors have continued to participate in scientific seminars and session presenting papers in different forum. During the quarter we also collaborated with BAEC and IAEA to train radiotherapy technician and medical physicists to enhance their knowledge.

2016 provides us an opportunity to refocus our energies to further improve our newsletter and strengthen its content with more interesting articles.

Happy New Year
to every one.

International Conference on Developments in Renewable Energy Technology



Mr Faridur Rahman Khan, Managing Director, United Hospital Limited and Vice Chairman, Board of Trustees, United International University (UIU), recently attended the International Conference on Developments in Renewable Energy Technology as Special Guest, which was inaugurated by the Honorable State Minister of Power, Energy & Mineral Resources, Mr Nasrul Hamid. The conference was presided by Professor Dr M Rezwan Khan, Vice Chancellor of UIU. Professor A K M Sadrul Islam, Chair of the Technical Committee and Head of Mechanical and Chemical Engineering Department of Islamic University of Technology (IUT), Professor S M Lutful Kabir,

Co-Chair of the Technical Committee Mr Shahriar A Chowdhury and Prof Raqibul Mostafa, Head of the EEE Department of UIU also addressed the audience.

Mr Faridur Rahman Khan in his speech expressed his delight to see ICDRET being organised for the fourth time by UIU. He said, "It takes a lot of patience, dedication and motivation to keep organising such an event". He also mentioned that "Over dependence on fossil fuel in the long run is not good for any country. Renewable energy can be replenished and is waiting to be harvested, so it is a viable option", he added that although the primary investment in renewable energy is quite high but its end results are cost effective and beneficial in the long run.



Glorious Achievement of United College of Nursing



Mr Faridur Rahman Khan, Chairman of United College of Nursing congratulated and rewarded Shafali who obtained 1st Position (jointly) in Post Basic BSc examination in 2015

With great pleasure we would like to inform that United College of Nursing (UCN) has obtained 1st position in merit list including 6 top position (out of 10) in the Post Basic BSc examination in 2015. This is the 1st batch of Post Basic BSc course of UCN.

This year, a total of 133 students from six government and private colleges appeared

for examination under Dhaka University. Amongst them 111 students successfully passed the examination which indicates 83.45% pass rate.

From UCN, 16 students appeared in the

final examination. The pass rate of UCN was 100%. Six students of United College of Nursing received honours mark and were amongst the top ten in merit list. They are:

- Shafali, 1st Position (jointly)
- Parvina Akter, 3rd position
- Nomita Gonsalves, 4th position

- Zannatul Ferdous, 7th position
- Santi Lata Mondal, 9th position
- Rekha Magret Costa, 10th position

The Chairman of United College of Nursing, Mr Faridur Rahman Khan, Prof Dr Momtaj Khanam, Principal, United College of Nursing (UCN) and Mr Najmul Hasan, Chief Executive Officer, United Hospital Limited along with other Senior Faculty Members were present on the occasion. Congratulations to all UCN students who passed the examination.

UCN is a wing of United Hospital Limited.



Case Report: Post Dengue Guillain Barre Syndrome (GBS)

Dr Afsana Begum, Dr Safia Binte Rabbani

Dengue, an acute viral disease transmitted by Aedes mosquitoes, is highly endemic in many tropical and subtropical areas of the world. Various types of neurological manifestations are described in dengue fever, of which peripheral neuropathy or GBS is rarely reported. This is the second case of post-dengue GBS reported from United Hospital in Bangladesh.

A 56-year-old South Korean man presented with fever, body ache, headache and skin rash for 2 days. There was no history suggestive of mucocutaneous bleeding. On clinical examination, patient was dehydrated; having generalized maculopapular rash more marked in face and trunk, his temperature was 99.4°F. Investigations showed hemoglobin of 15.2 g/dl, total leukocytes count 2300/mm and platelet count 1,20,000/mm. Dengue NS1 was positive. He was conservatively managed and discharged from hospital. Four days later, the patient developed

weakness and numbness of all four limbs associated with areflexia in lower limb. Muscle power was Grade 2/5 in lower limbs and grade 3/5 in upper limb. There was no clinical involvement of cranial nerves, sensory system, or autonomic nervous system initially. His serum potassium level was 3.15 mmol/L which was corrected by potassium supplementation. Nerve conduction study showed mixed motor and sensory peripheral neuropathy consistent with GBS. Cerebrospinal fluid analysis showed 3 leukocytes/mm, protein 194.57 mg/dl, and sugar 5.02mmol/L. A diagnosis of GBS - acute motor-sensory axonal neuropathy (AMSAN) variant - was made and a 5 days course of intravenous immunoglobulin was given. During this time patient was also put on mechanical ventilation due to development of respiratory failure as well as supraventricular tachycardia along with hypertensive heart failure. Later the patient was shifted to South Korea under

support of artificial ventilation by air ambulance as per the wish of his guardians.

Neurological complications in Dengue are hypothesized to occur through three pathogenic mechanisms:

- 1) Neurotropism leading to encephalitis, meningitis, myositis and myelitis,
- 2) Systemic complications resulting in encephalopathy, stroke and hypokalemic paralysis and
- 3) Postinfectious immune-mediated ADEM, GBS and optic neuritis.

GBS is a post-infectious polyradiculopathy known to occur in post-gastrointestinal infection with Campylobacter jejuni and other infective agents, like Mycoplasma, CMV, EBV and Herpes virus. It rarely occurs due to demyelination in post-dengue infection. So, in conclusion, patients presenting with GBS in whom no usual antecedent infections are identified, screening for dengue virus infection may help in identifying a rare cause.

Knee Micro-Fracture Surgery

Dr A H M Rezaul Haque

Nasima Akter, a 40 year old lady complained of pain in the left knee for six months due to a fall. She consulted with an orthopaedic doctor & did all kinds of relevant investigations but did not get any relief. We examined her & saw her reports but could not correlate clinical findings with the investigation. So, we advised her for arthroscopy and during arthroscopy found cartilage injury and exposed subchondral bone. Her ligaments and meniscus were intact. Hence, we performed micro-fracture. After two months she got some relief.

Micro-fracture surgery is an articular cartilage repair surgical technique that works by creating tiny fractures in the underlying bone. This causes new cartilage to develop from a so-called super clot. Micro-fracture surgery was developed in early 1990s by Dr Richard Steadman and has gained popularity in sports in recent years.

Knee micro-fracture surgery is a common procedure used to repair damaged knee cartilage. Cartilage helps cushion and cover the area where the bones meet at the joints. When cartilage damage occurs, joints no longer have smoothness between the bones. Cartilage damage is like a pothole on the road. In cartilage repair we are filling in the pothole so it does not get larger.

Micro-fracture therapies try to harness the body's healing power to repair damaged cartilage that must heal & mature into an effective repair tissue for the procedure to work.

Cartilage restoration bridges the gap between symptom relief & joint replacement surgery.

Indication

- Repair of injured or damaged cartilage in the joint

- Prevention or slowdown of arthritis development
- Osteochondritis dissecans

Drawback of Microfracture

- The new cartilage (fibrocartilage) made by micro-fracture is not as strong as the body's original hyaline cartilage

Procedure

Micro-fracture surgery is performed through arthroscopy. It takes about 30-60 minutes and can be done as an outpatient basis.



Fig A:
Injured
Cartilage
(1, 2, 3, 4)



Fig B:
After
regeneration

Most people do well after this surgery. Recovery time can be slow. Many people can go back to sports or other intense activities in about 4-6 months. People under the age of 40 with a recent cartilage injury often get the best result. People who are not over weight also have better results.

National Training Program (NTP) for Medical Physicists



A five days training program from 8-12 November 2015, as a part of NTP for Medical Physicists was organized by Bangladesh Atomic Energy Commission (BAEC) with technical support of International Atomic Energy Agency (IAEA) and

local support of Oncology Club and United Hospital. This was held at the Department of Radiation Oncology in United Hospital, Dhaka.

IAEA assigned two renowned faculty

experts as trainers under the Technical Cooperation Program. Dr T Ganesh, Chief Medical Physicist, Fortis Memorial Hospital, Gurgaon, India, Dr Madhava Bhatt Chief Medical Physicist, Adelaide Cancer Center, Australia and Mr Karthick Raj Mani, Consultant Medical Physicist were the facilitators in this training program. Theoretical as well as practical sessions were held at the Department of Radiation Oncology, United Hospital for 5 days along with hands on training on Absolute Dosimetry and Quality Assurance of Linear Accelerator. Around 25 Medical Physicists from various Radiotherapy Centers across the country attended this training. The workshop was highly appreciated by everyone.

International Conference On Neonatology

The 4th International Conference 2015 (Bangladesh Neonatal Forum) was held on 28 & 29 November 2015 at "Krishi Institute" Khamar Bari. From United Hospital a panel of 12 doctors and nurses attended the Conference.

Dr Nargis Ara Begum, Consultant of Neonatology presented a paper on "Update on Management of Persistent Pulmonary Hypertension of Newborn (PPHN)" on 29 November 2015.



Missed Diagnosis of Meckel's Diverticulum as a Cause of Recurrent Intestinal Obstruction Over 8 Years – Case Report

Prof Dr Anisur Rahman

Post operative intestinal obstruction is a known complication which can occur starting from immediate post operative period to many years later. But early intestinal obstruction due to a missed pathology during the initial surgery is not very common. Here we present such an uncommon case of post operative intestinal obstruction.

Patient, a 38 year old male, had open appendectomy in 2006 in a district hospital. Since then he had recurrent attacks of intestinal obstruction for which he was admitted in different hospitals at home and abroad. During his last admission in hospital abroad, he was advised surgery. He preferred to return home to have the surgery.

At Diagnostic Laparoscopy dense adhesions were seen in

the region of appendix, which were divided and the intestine was freed. On further dissection our finding came out to be Meckel's Diverticulum which was causing the intestinal obstruction due to a strong band extending from the tip of the abdominal wall compressing the intestine. The adhesions were divided and the Meckel's Diverticulum was excised laparoscopically using endo GI stapler. The patient had an uneventful postoperative recovery.

Meckel's Diverticulum is a congenital pouch on the wall of the distal ileum which occurs in approximately 2% of the population, of that only 2% are symptomatic and

they tend to be typically below the age of two. This case is a unique one as the diagnosis is very unusual; Meckel's Diverticulum being very rare in adults and is usually diagnosed at laparotomy. Most cases are treated by laparotomy and excision by wedge resection. This patient had suffered for 8 years because appropriate diagnosis was not made and the primary surgeon did not follow the dictum of examining the last 2 feet of terminal ileum during appendectomy. This also shows the superiority of laparoscopic appendectomy over open procedure, as overall evaluation of the other suspected pathologies can be made.



Figure 1 Dense Adhesion



Figure 2 Meckel's Diverticulum causing intestinal obstruction



Figure 3 Using Endo GI Stapler to excise Meckel's

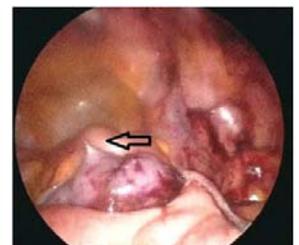


Figure 4 Post excision status

A Case of Left Main Complex Coronary Artery Angioplasty

Dr Kaisar Nasrullah Khan, Dr Mujibur Rahman, Dr Samsun Nahar, Dr Rajib Dhar

A 47 year old gentleman was admitted to the United Hospital with the complaints of central chest pain on mild exertion for 7 days. As he had a medical history of hypertension and dyslipidemia, he decided to undergo cardiac screening on his own.

His resting ECG showed a sinus rhythm at 62 bpm and Echocardiography revealed no regional wall motion abnormality with normal LVEF-65%. During the treadmill test patient complained of chest pain and ECG showed ST elevation in aVR and ST depression in all other leads and in stage II that was strongly positive. He was then advised for urgent CAG (Coronary Angiography) which showed TVD (Triple Vessel Disease) with severe left main disease. His syntax score was total 25, EuroSCORE II 0.85 and thus he was advised for urgent CABG.

After CAG the patient suddenly developed chest pain. ECG showed ST elevation in lead aVL and V1 and gross ST depression in all other leads with bradycardia & hypotension.

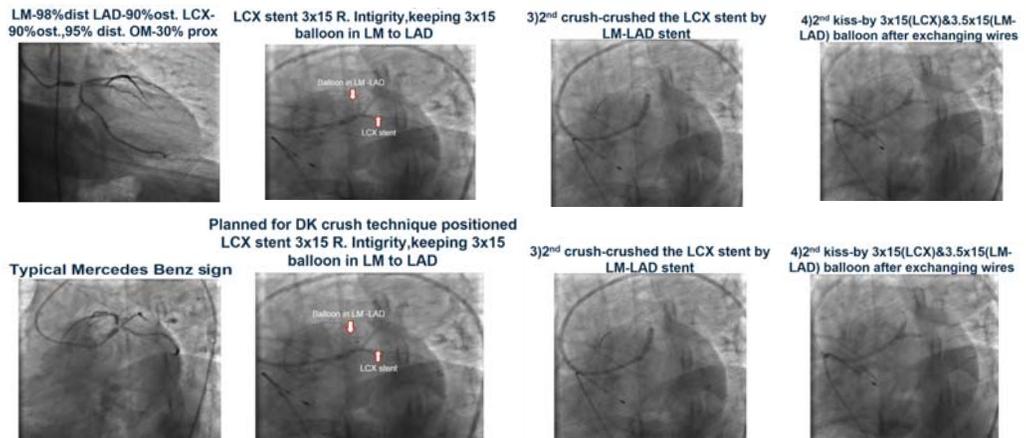
Then TPM was done with inotro-

pic support and prepared the patient for urgent PCI because patient was haemodynamically unstable and there were no other options available at that time so we planned DK Crush technique for LM stenting.

Then XB-3.5 (7F) PTCA guiding catheter and two whisper MS wire were taken. One was placed in LAD and another was placed in LCX. Both the lesions in LCX and LAD were predilated in succession with 2.5 mm x 10 mm, 2.0 mm x 11 mm and 2.5 mm x 15mm balloons, inflated at 12 ATM. Covering the lesion in LCX, 3.0 mm x 15 mm drug eluting stent was

deployed at 12 ATM. Then the lesion in LAD was predilated in succession with 2.5 mm x 15 mm, 3.0 mm x 12 mm balloons inflated at 12 ATM. Covering the lesion in LM to LAD. 3.0 mm x 18 mm drug eluting stent was deployed at 12 ATM. Instant kissing balloons dilation was done with (LAD) 4.0 MM X 15 MM (LCX) 3.5 mm x 12 mm balloons, inflated at 16 ATM. Final angiogram showed the LCX & LM to LAD were well revascularized with good distal flow.

This case was presented on 11 October 2015 in 'TCT 2015' in San Francisco, California, USA.



Role of Physiotherapy Treatment in ICU

Bijoy Das

Physiotherapy is an integral part of the management of patients in Intensive Care Units (ICUs). The most important aim in this area is to enhance the overall patient's functional capacity and to restore his/her respiratory and physical independence, thus decreasing the risks of bed rest associated complications. This article is a review of evidence-based effectiveness of weaning practices and physiotherapy treatment for patients with respiratory insufficiency in ICU. The evidence for applying a weaning process and physiotherapy technique in these patients has been described according to their individual rationale and efficacy.

The growing number of patients treated in ICUs all over the world makes this non pharmacological approach both welcome and interesting. However, to date, there are only strong recommendations concerning the evidence-based strategies

to speed weaning.

Physiotherapists in the ICU are part of a multi-disciplinary team involved in the treatment of critically ill patients. Physiotherapist works closely with medical, nursing and other allied health professionals regarding patient condition, progression and treatment plans.

In Intensive Care Units, physiotherapists are involved in the prevention and treatment of pulmonary, circulatory, musculoskeletal system and integumentary complications, by regular chest physiotherapy, graded mobilization and proper positioning of patients.

The roles of physiotherapist in the ICU in brief are positioning, mobilization, manual hyperinflation, percussion, vibration, coughing, various breathing exercises, application of aerosol, humidification, incentive spirometry, forced expiratory

techniques and limb exercises.

Chest physical therapy is used in the ICU to minimize pulmonary secretion retention, to maximize oxygenation, and to re-expand lung segments.

Percussion stimulates patient to cough, adding vibration on exhalation assist mobilization of secretions; percussion given again as necessary. Patient should be encouraged to cough frequently using stimulation/suction.

When the spontaneous cough is inadequate to mobilize secretions, directed cough techniques need to be applied. Directed cough techniques are deliberate maneuvers that are taught, supervised, and monitored. The Forced Expiratory Technique, or "huff cough," and manually assisted cough are two such maneuvers.

There are few contraindications to apply Chest Physiotherapy techniques on patients of intensive care units where physiotherapists are right person to modify treatment protocol accordingly.

Comparison of Cardiac and Lung Doses Between Free Breathing and Deep Inspiration Breath Hold Technique For Breast Irradiation-A Dosimetric Study

Dr Md Rashid Un Nabi, Karthick Raj Mani, Ramaa Lingaiah, Anisuzzaman Bhuiyan, Faruk Hossain, Kh. Anamul Haque, Mohammad Taimur, Dr Ashim Kumar Sengupta, Dr AFM Kamal Uddin

The objective of the study was to investigate the cardio-pulmonary doses between Deep Inspiration Breath Hold (DIBH) and Free Breathing (FB) technique in left sided breast irradiation

DIBH CT and FB CT were done for 10 patients with left sided Ca breast, who underwent whole breast irradiation with or without nodal irradiation. Three fields single isocenter technique was used for node positive patients along with two tangential conformal fields whereas only two tangential fields were used in node negative patients. All the critical struc-

tures like lungs, heart, esophagus, thyroid, etc were delineated in both DIBH & FB scan. Both DIBH and FB scan were fused with the dicom origin as they were acquired with the same dicom coordinates. The critical structures of the FB scan were transferred to the DIBH dataset with reference to the dicom origin. A plan was created in the DIBH scan for a dose range between 45-50Gy in 25 fractions. Critical structures doses were recorded from the Dose Volume Histogram for both the DIBH and FB data set for evaluation.

V25 (relative volume receiving 25Gy and more) for heart was reduced from 19.14% (FB) to 3.68% (DIBH) using the breath hold technique. Ipsilateral lung V20 volume was also reduced between 25% to 15% with DIBH compared to FB technique.

DIBH shows a substantial reduction of cardiac and pulmonary doses compared with FB technique. Using the simple DIBH technique we can effectively reduce the cardiac morbidity and lung pneumonitis.

World Prematurity Day Get Together

On the occasion of World Prematurity Day 2015, Neonatology Department of United Hospital organized a "Get Together Program" on Saturday 5 December 2015 for the parents and their premature babies who were treated at United Hospital. Marketing Department of the Hospital coordinated the session. Prof Mohammad Shahidullah, Professor

of Neonatology, BSMMU & President-BPA and Prof M A K Azad Chowdhury, Professor of Neonatology, Dhaka Shisu Hospital & General Secretary -BPA was present as special guests to adorn the program. Dr Nargis Ara Begum, Consultant, Neonatology Department of United Hospital delivered a presentation.



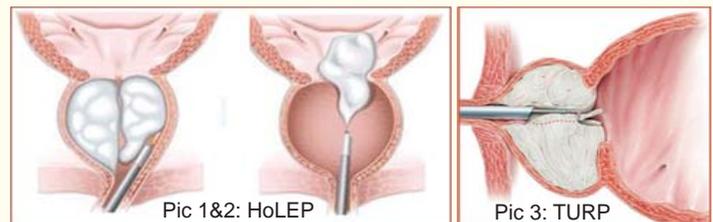
Prostate Surgery: TURP VS HoLEP

Dr M Zahid Hasan

Few months back a middle aged man presented to the A & E Department, United Hospital with acute resistant retention of urine with history of LUTS and long term medication. Immediate USG of prostate showed moderate sized prostate. We planned TURP (Trans Urethral Resection of Prostate) for him and cystoscopy showed hugely enlarged prostate which we assumed would be difficult to manage with TURP. Excess bleeding and TURP syndrome were likely complications for this particular patient. After consultation with the patient and his relatives, we performed HoLEP (Holmium Laser Enucleation of Prostate) with minimum bleeding and shorter expected time requiring no blood transfusion and no postoperative complication.

Prostate is an accessory male sex gland that produces 30% of seminal fluid which nourishes and protects sperm both in male and in female genital tract. From childhood prostate grows slowly at a controlled rate but after the age of 40 or 50 years, because of altered Testosterone and Estrogen levels in blood and increased sensitivity of androgen receptor on prostate glands it starts growing at a faster rate and produce mechanical pressure on Urethra and Bladder, a condition called BPH (Benign Prostatic Hyperplasia). Some BPH cases produce symptoms (LUTS) which need treatment. Most of these patients can lead normal life with medical treatment. A small percentage shows aggravation of symptoms & signs with increasing age and even with maximum possible medication they require

surgery. In this era of technological advancement, open operation is now very rare and endoscopic removal of excess prostatic tissue through urinary passage is standard practice. Till now Diathermy (Electricity) based TURP is most popular and cost effective.



Recent addition of improved technology, LASER based HoLEP has some advantage over and above TURP which are as follows:

1. In HoLEP procedure the chance of hemorrhage is almost zero
2. Bleeding almost zero so no blood transfusion required
3. Shorter hospital stay, shorter operative time in large sized BPH
4. Less incidence of short and long term complications
5. Advantageous for patients with multiple co-morbidities
6. No chance of hypotonic fluid accumulation in circulation so no cerebral edema, hyponatremia etc.

The Finance, Accounts and Audit Departments of United Hospital

The Finance and Accounts department is responsible for overall financial management of the hospital, to ensure that it is operating efficiently and effectively with the resources available. Its role includes the monitoring and controlling of hospital finances and setting of budgets on an annual basis. In addition the department is responsible and accountable for the accuracy, quality and validity of all financial transactions and production of statutory financial statements. The department has a staffing strength of 60 working under the leadership of Chief Financial Officer.

The department has two sections- Financial Accounting and Management Accounting. Financial Accounting has responsibility for Accounts Payable, Accounts Receivable including Health Insurance/ Credit Facility. The receivable department is responsible for

spends and provides support to the clinical departments on financial matters. The management accounting team also has responsibility for all costings and the annual specialty costing return. Monthly analysis and reporting of net outturn versus plan is a core function of this department. The department is responsible for the preparation of the annual Specialty costing exercise and the development of costing information systems.

The terminology used for the Receivable unit in our hospital is Business Office. The staffs of the unit are focused on providing the same high level of care similar to that provided to patients by other clinical and other non-clinical departments. Business office is open for patient service 24 hours a day, 7 days a week, irrespective of any holidays. The unit is divided in two sections- Out Patient (OPD) and In Patient (IPD).

other hospital related service & information.

The IP (In-Patient) billing section has the responsibility of preparing bills of admitted patients and providing bill details to patients and their attendants. Our staff provide answers to a variety of questions regarding charged items and provide detailed explanation to erase any doubt from their minds. They also explain to the patients covered under insurance, the basis and conditions under which the insurance company has approved their treatment, the limitations imposed and calculations made.

The Management Accounting unit is primarily involved with financial planning and includes the function of reimbursement, decision support, budgeting, business plan evaluation, routine payment of salaries and other entitlements, development of costing systems



raising of all hospital invoices & bills and timely collection of income. The Health Insurance and Credit Facility unit validates facility to patient treatment and ensures claims are submitted to health insurers and corporate clients in a timely manner. The Accounts Payable department is responsible for the recording, validating and payment of vendor invoices, reconciliation of supplier statements and ensuring compliance with revenue requirements. The Payroll department is responsible for the timely preparation of payrolls and for ensuring accuracy and validity of payments to employees.

Management Accounting operates a developed budgetary management process within the context of an annual service plan and prepares the annual budget, monitors budget versus actual

The work of the OPD Billing section includes receipt of bills related to investigations and test that a Consultant prescribes to patients who come and visit them for consultation. The section also receives payments related to pharmacy sales and patient admission. The payment counters remain extremely busy and the well trained and experienced billing officers / executives serve patients to their satisfaction. In addition they also respond to queries from patients regarding doctors and

and maintain financial control. The unit also conducts operational and financial audits.

Book keeping has now been replaced by accounting software. In United Hospital we have a customized software – Integrated Hospital Information System called UniCare, which serves almost all



hospital needs and records and monitors all hospital related activities.

After summarizing all accounting information, the job of the Accountant begins i.e. accountancy starts where book keeping ends. The tasks of Financial Reporting start and end through an extensive and exhaustive process. The end product is the Financial Statements: Balance Sheet, Comprehensive Income Statement, Cash Flows Statement, Changes in Shareholder's Equity and related notes prepared in compliance with Financial Reporting Standards which are duly audited by the external Auditor, being mandatory by the

A part of the hospital revenue is based on credit. Purchases, consumptions and physical inventories of various items are reconciled so as to observe whether there is any abnormal consumption causing inefficient purchases which tie up company funds. After regular observation, they ultimately improve

tools - budgets, policies and management accounting mechanism.

The Internal Audit department extends aid in this regard by providing valuable information. How efficiency through compliance / internal control can be achieved is the crux of the company policy for which the Finance & Accounts and Internal Audit Departments work tirelessly. Accountants and Auditors are the watch dog of the company.



Internal Audit Department of United Hospital

Internal auditing is an independent, objective tool and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes.

The Internal Audit department of the

Company's Act. The unit focuses on External Reporting to Stakeholders and Internal Reporting to the Board.

Patient services are reviewed by the hospital management at regular intervals to ensure accuracy of bills. Costing in this regard plays a pivotal role. Each operational activity involves a complex relationship with various resources - products and equipments, clinical and non-clinical services. All these variables are considered before reaching a realistic price.

working capital position.

Finance & Accounts department maintains relationship with the Regulatory Authorities regarding taxation, VAT and other corporate affairs. They keep the credit rating agency informed of the company's financial results and condition which is vital in the case of institutional loan. The department identifies the financial health of the hospital with the help of certain indicators which measures the real position of operational activities.



hospital is focused on bringing efficiency through compliance and internal control. The department acts as the watch dog of the company, examining, evaluating and reporting to management and the directors on the adequacy and effectiveness of components of the accounting and internal control systems. Its functions include monitor internal controls, examine financial and operating information, review economics, efficiency & effectiveness of operation, review compliance with laws, regulations & other external requirements and execute special investigations on suspected fraud.

Cost has a tendency to creep up like creepers so there is a need to control cost. The department focuses on this vital issue with the following



Focused Ultrasound in Emergency Focused Assessment with Sonography in Trauma (FAST)

Dr Khaleda Parvin Rekha

Focused or Emergency ultrasound is used to diagnose quickly a limited set of injuries or pathologic conditions. It is rapid, portable, repeatable and noninvasive, avoids radiation to allow diagnosis more quickly and manage disease more efficiently. This increases patient satisfaction, decreases length of stay in emergency department, lowers health-care cost and most importantly- saves a life.

The emergency ultrasound has some very specific attributes that shape its character

Characteristics of Emergency Ultrasound

- Clearly defined emergency indication
- Focused, not complete
- One or more easily recognizable findings
- Easily learned by emergency physician
- Quickly performed
- Done at the bedside
- Directly impacts clinical decision making

Indications for Emergency Ultrasound-

- Blunt abdominal trauma
- Suspected pericardial effusion / tamponade / cardiac arrest
- Suspected abdominal aortic aneurysm
- Suspected gallbladder disease
- Suspected renal colic
- Suspected ectopic pregnancy

Algorithm for use of ultrasound in assessment of blunt abdominal trauma

(CT = computed tomography; DPL = diagnostic peritoneal lavage)

The initial scope of bedside ultrasound by emergency physicians was limited to six primary areas utilizing four views, called FAST exam. The FAST exam is a highly sensitive and specific screening test for identifying patients with hemoperitoneum and/or hemopericardium in need of immediate surgery. The FAST exam views are:

1. Morrison's Pouch: The right upper quadrant at the interface between the liver and Gerota's fascia of the right kidney.
2. Perisplenic View: The left upper quadrant visualizes the left kidney and spleen.
3. Pelvic View: The rectovesicular pouch in males and the cul-de-sac in females utilizing both transverse and longitudinal views of the pelvis.
4. The Pericardium: Evaluation for pericardial effusion by placing the probe just to the right of the patient's xiphoid.

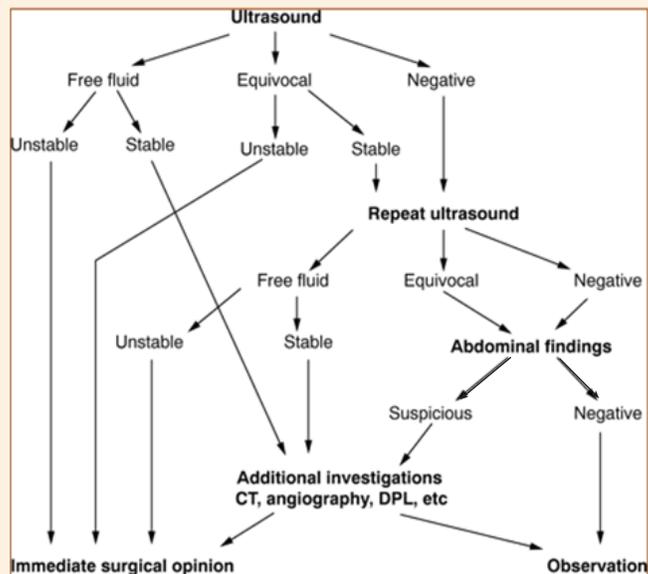
In the UK and USA with the widespread adaptation of ultrasound in emergency practice & availability of well developed portable ultra-

sound machine, FAST exam is expanded and is called E-FAST exam. Recently added applications are: deep venous thrombosis, ultrasound of musculoskeletal, ocular and procedural ultrasound.

Hence, focused ultrasound examinations provide immediate information and indicate specific physical condition of the patient which increases the scope of practice of emergency physicians directly.



Portable Ultrasound Machine at United Hospital



Bangladesh Cancer Congress 2015

United Hospital participated in Bangladesh Cancer Congress 2015 from 16-17 November 2015 at Army Golf, Palm View Restaurant in Dhaka. Oncologists from home and various parts of the world with a total of 650 participants attended the congress. The team from United Hospital dominated the scientific sessions with 6 oral presentations and 6 poster presentations which covered the entire spectrum

of Oncology. Dr Ferdous Shahriar Sayed, Dr Rashid Un Nabi, Dr Rumana Dowla, Mr Karthick Raj Mani and Mr Md Anisuzzaman Bhuiyan presented oral papers. Mr Saimul Alim's oral paper was on "young investigator session". Dr Sajad Hossain, Dr Ashim Kumar Sengupta, Mr Md Faruk Hossain, Mr Kh Enamul Haque and Ms Ramaa Lingiah presented poster papers. Dr Ferdous Shahriar Sayed and Dr Rashid



Un Nabi were rapporteurs for the plenary and lung sessions respectively.

United Hospital Participation in CSR Program



On the occasion of Breast Cancer Awareness Month and as a part of CSR activity, Awareness Session on Breast & Prostate Cancer was organized on Wednesday 14 October 2015 for the employees of H & M Hennes & Mauritz AB. About 200 male & 100 female employees of H & M will took part in the two separate sessions.

An Awareness Session on Back Pain was organized on Tuesday 10 November 2015 for the employees of Auko Tex Group. About 100 employees of Auko Tex Group took part in the session.

As a part of CSR activities and on the occasion of World Diabetes Day 2015, United Hospital Limited organized an

“Awareness Session on Diabetes” on Monday 16 November 2015 for the staff of Philip Morris International, Dhaka Office and for Nitol Niloy group on Tuesday 17 November 2015.

Awareness Session on Common Menstrual Health Problem & its Management was held on Saturday 28 November 2015 for the Women Entrepreneur Association of Bangladesh (WEAB) members by Dr Hasina Afroz, Consultant, Obstetrics & Gynecological Department of

United Hospital. She also conducted another session on the same topic at Banglalink Digital Communications Limited at Banglalink Corporate office.

Dr Mahboob Rahman Khan, Family Physician of United Hospital gave a presentation on “Stress Management” on 3 December 2015 for the employees of Grameenphone Limited to educate them on how to reduce or manage this problem. The session was attended by 150 Grameenphone employees.



Prophylactic Low Molecular Weight Heparin (Enoxaprin Sodium) in Oncology Patient: Outcome of Study in High Risk Patients

Dr Ferdous Shahriar Sayed, Dr Ashim Kumar Sengupta, Dr Sharif Ahmed

To validate the usefulness of ASCO clinical practice guideline update 2014 in managing non-ambulatory cancer patients with prophylactic low molecular weight heparin to reduce the occurrence of Venous Thrombo Embolic (VTE) manifestation in our high risk cancer patients.

After observing non-ambulatory cancer patients developing VTE (7 DVT, 2 PE) at United Hospital, suffering from different malignancies with a heterogeneous population of early cancer, patients receiving chemotherapy and admitted with poor general condition or adverse effect of chemotherapy and metastatic or recurrent cases of malignancies, the decision was to implement at least, partially, according to the current ASCO, ESMO, NCCN guideline of prophylactic management of VTE. We used prophylactic 40 mg of low molecu-

lar weight heparin (Enoxaprin Sodium, Clexane) as subcutaneous once daily dose as anticoagulant in high risk non-ambulatory patients as per recommendation of guidelines and observed for any VTE events in those patients. High risk patients were stratified from other patient population accordingly to patient related, cancer related, treatment related and biochemical parameters.

The selective use of low dose of low molecular weight heparin (Clexane), 40 unit subcutaneous, once daily was found to be extremely efficacious in that not a single patient had developed VTE. Only 2 out of 23 patients developed mild hematuria with a temporary cessation of low molecular weight heparin. Patients were administered low molecular weight heparin during hospital stay and advised to take low

molecular weight heparin at home. They were counseled for detecting / suspecting possible VTE and DVT & PE as well as the signs & symptoms of anticoagulant therapy (that is, risk of bleeding) with a follow up after 7 days of low molecular weight heparin with CBC, APTT, PT-INR and then monthly. Minimum of 3 months therapy was prescribed with a maximum duration of 6 months.

It is suggested from experience that strict guideline based prophylactic measures should be taken to prevent VTE & potential fatalities in non ambulatory & some high risk ambulatory patients as per ASCO, ESMO & NCCN guideline and all Oncologists should be proficient regarding carrying out of this recommendation to provide optimum medical oncological management to the patients of Bangladesh.

Visits to United Hospital



- Visit by Dr Ganesh Rajamani, Regional Provider Services Manager, Allianz Worldwide Care, Ireland on 26 October 2015.



- Ms Margareta Laevens, Researcher of Medical Section of Directorate Exceptional Stay of General Directorate Aliens' Office, Brussels, Belgium visited with a three member team on 1 December 2015.
- A delegation from GIZ led by Dr Stefanie Wagner, Director and Head of Department of Medical Services, GIZ Headquarters (Germany) visited United Hospital on 17 December 2015.

AICT Congress 2015

The 11th Asia Interventional Cardiovascular Therapeutics (AICT) Congress 2015 recently took place in Pan Pacific Sonargoan Hotel, Dhaka from 13-14 November 2015. AICT Congress is the annual interventional cardiology meeting of the Asia Pacific Region organized by Asian Pacific Society of Interventional Cardiology (APSIC). The Congress rotates between different countries of Asia Pacific Region every year and this year the hosting nation was Bangladesh. Dr N A M Momenuzzaman, Chief Consultant Cardiology

was the Chairman of the Hosting Committee and Prof Afzalur Rahman was the Local Scientific Chairman and Organizing Secretary. From 22 countries, 467 delegates participated in the Congress. Renowned Cardiologists from Asia, Europe and America were the faculty members. Consultants and Specialists of the Cardiology Department of United Hospital participated in the Congress and presented different topics. They are Dr N A M Momenuzza-

Corporate Agreement Signing

- Corporate Agreement Signed with Mutual Trust Bank Limited (MTB) on Monday 12 October 2015.
- Agreement signed with Standard Chartered Bank Limited (SCB) on Thursday 5 November 2015.
- Mr Yanagisawa Motohiko, Executive Director of WellBe International Loss Adjusters Limited, Hongkong signed an agreement with United Hospital Limited on Sunday 15 November 2015.
- Corporate signing between Midland Bank Limited & United Hospital Limited was held on Tuesday 17 November 2015. Mr Md Ridwanul Haque, Senior Vice President & Head of Retail Distribution, Midland Bank Limited and Dr Shagufa Anwar, Chief of Communication & Business Development, United Hospital Limited signed on behalf of the respective institution.
- Mr Shamim A Chowdhury, President & Managing Director of AB Bank Limited signed an agreement with United Hospital Limited on Monday 23 November 2015.
- Bengal Communications Limited signed an agreement with United Hospital Limited on Tuesday 1 December 2015.



Antenatal Classes for Expectant Mothers

As part of patient education and consequent value addition to the treatment, United Hospital is conducting Antenatal Classes under the supervision of Obstetrics & Gynaecology Department. Participants were pregnant mothers and their husbands. Dr Afsari Ahmed, Junior Consultant, Obstetrics & Gynaecology Department, Ms Tasneem Hasin, In-Charge, Dietetics & Nutrition Department, Ms Umme Kulsum Laizu, Physiotherapist and Ms Rimi Mondal, Senior Staff Nurse of United Hospital gave presentations on various topics. Consultants of Obstetrics & Gynaecology Department inaugurated the session.



man, Dr Fatema Begum, Dr Kaiser Nasrullah Khan, Dr Abu Mohammad Shafique, Dr Solaiman Hossain and Dr Afzalur Rahman.

IAEA Supported Training Programme for Radio Therapy Technologists



A five days training program from 4-8 October 2015 as part of a National

Training Program (NTP) for Radio Therapy Technologists (RTT) was organized by Bangladesh Atomic Energy Commission (BAEC) with technical support of International Atomic Energy Agency (IAEA) and local support of Oncology Club & United Hospital.

IAEA assigned two renowned faculty experts Osztavics Andreas from Vienna, Austria and Michelle Leech

from Dublin, Ireland as trainers under the Technical Cooperation Program. A day long practical session was held at the department of Radiation Oncology, United Hospital. Live demonstrations of the fabrication of immobilization, treatment planning for breast cases, case discussions and image guided treatment delivery procedure were displayed to the participants. Twenty Radio Therapy Technologists from various Radiotherapy Centers across the country attended the training.

Seminars & Workshops

- On the occasion of Nuclear Medicine & Molecular Imaging week, a Scientific Seminar on "Role of Nuclear Medicine in Advanced Clinical Practices" was arranged on Sunday 11 October 2015 at United Hospital. Dr M A Wahab, Consultant, Nuclear Medicine Department was the speaker. Hospital doctors, allied staff and guests from NINMAS attended the seminar.
- A Scientific Seminar was arranged on "Thyroid Function in Pregnancy" on Thursday 12 November 2015 at United Hospital on the occasion of World Diabetes Day 2015. Dr Nazmul Islam, Consultant, Diabetes & Endocrinology Department was the speaker.
- A Scientific Seminar on "Recent Advances in Oncology & Nuclear Medicine" was arranged on Tuesday 8 December 2015 at Faridpur Medical College Hospital. Radiation Oncology

Consultants Dr Saumen Basu, Dr Md Rashid Un Nabi and Nuclear Medicine Consultant Dr M A Wahab were the speakers. Prof Dr A S M Jahangir Chowdhury, Principal, Faridpur Medical College was the Chief Guest. Prof Dr Md Zohirul Islam Miah, Principal, Diabetic Association Medical College, Faridpur, Dr Gonopoti Biswas, Superintendent, Faridpur Medical College Hospital, Dr Ashit Ranjan Das, Civil Surgeon, Faridpur & Dr Md Mahfuzur Rahman Bulu, General Secretary BMA, Faridpur were present as special guests. Dr Nizamul Haque, Associate Professor & Head, Department of Radiotherapy, Faridpur Medical College Hospital was present as Session Chairman.

- A Scientific Seminar on "Updates About Advancement of Neurosurgery and Critical Care Management at United Hospital" was arranged on

Saturday 19 December 2015 at Dhaka National Medical College, Dhaka. Dr Syed Sayed Ahmed, Consultant & Director, Neuro Centre & Dr Mohd Maniruzzaman, Consultant & Chief of ICU of United Hospital were the speakers of the seminar.



On 5 October 2015, nurses Popy Rani, Farzana Khatun, Nasrin Akter and Salina Akter from United Hospital attended a one day orientation workshop on "Bio Safety and Infection Control for Hospital Nurse" in IEDCR, Mohakhali, Dhaka.

Case Presentation by Nursing Department

On 8 October 2015, a case presentation on "Stevens-Johnson Disease Syndrome" was held by the Nursing Department. The presenters were Teodolfo M Clarete, Taslima Akter,

Jannatul Ferdous, Jasmin Akter, Rakibul Hasan, Hasan Tarek and Mohammad Salauddin. This was appreciated by the consultants who were present.



Advanced Fire Education / Research in Asia

Major Md Moinul Hossain (Retd.), Manager, Admin and Security and Dr Rishad Choudhury Robin, Coordinator Clinical Support attended the fourth seminar of the forum for Fire Safety in High Rise and Industrial Buildings in

Asia at Fire Service and Civil Defense Training Complex, Dhaka on 15 & 16 November 2015. The seminar was

jointly organized by Tokyo University of Science, Japan and Fire Service and Civil Defense, Bangladesh.



New Consultants



Dr Saumen Basu
MBBS, MD (Radiation Oncology)
DNB (Radiation Oncology),
Department of
Radiation Oncology



Dr Hasina Afroz
MBBS, MS (Obs & Gynae)
MCPS, FCPS
Department of Obs & Gyane



Dr Tanveer Bin Latif
MBBS, MRCP (UK)
Department of Nephrology

We Congratulate the Newly Weds on Their Marriage

- Accounts & Finance Department's Executive Abdul Aziz got married to Akhi Akter on 29 October 2015.
- Customer Relation Officer Rana William Rozario got married to Delcy Margaret Costa on 28 December 2015



Congratulations & Best Wishes to the Following Staff and Their Spouses

- Nursing Department's Staff Nurse Juthi Akter of Neuro Ward 5th Floor had a baby boy Jawad Afnan on 30 September 2015.
- Oncology Department's Senior House Officer Dr Tanjima Rahman of 6th floor had a baby boy Aayan Reza on 14 August 2015.
- Oncology Department's Senior House Officer Dr. Raina Tunny Jahan of 6th floor had a baby girl Safwana Rushda on 19 September 2015.



Annual Picnic 2015

This year in this quarter three departments went for picnic.

On 4 December around 300 doctors, nurses and guests of Cardiology Department went to Sohag Polli for picnic. Nursing Department went to picnic at "Hasna Hena" on 8 December. Ancillary Service Department enjoyed their picnic at Nandan Park on 25 December 2015.



Condolence & Prayers

- ENT Department's Junior Consultant Dr Md Robiul Islam lost his father Mr Rajob Ali on 7 October 2015.
- Nursing Department's Staff Nurse Kulsum Khanam of 3rd floor lost her father Md Abdul Khalek on 27 November 2015.

Fire Drill 2015

United Hospital with support from instructors of Fire Service Department organized a Fire Fighting Training program for the staff of different departments, particularly for those who are most in touch with patients and who would be in a position to react immediately in case of any fire. The training was imparted over a period of three days - from 24 to 26 November 2015. The first two days focused on lectures and theoretical aspects including (i) informa-

tion on the types of fire (ii) the different types of fire extinguishers (iii) which type to be used in what type of fire (iv) the actions to be taken immediately when fire is detected (v) the precautionary measures to take, to ensure safety of the individual and the patients (vi) knowledge about exit routes (vii) assembly areas and a host of other topics. The third day was reserved for practical demonstration on the use of fire extinguishers, evacuation methods & procedures and first aid to the smoke affected people etc.

Participants from different departments including nursing, housekeeping, security, admin, F&B etc attended the theoretical classes. On the third day the "Fire Drill" included (i) the use of stairways as an escape route in the event of fire or emergency (ii) the use of crane and ladder to rescue people trapped in fire (iii) taking immediate measures using first aid and transferring the injured person in an ambulance to the nearest hospital. Participants also used fire extinguishers and water hydrants to extinguish different types of fire.



Happy New Year

2016

Wish you a very happy, healthy & prosperous

New Year



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