

Editor's Note

Our support to the community by offering Health Screening for prevention and detection of diseases saves one from the burden of disease load by early lifestyle changes & treatment. Similarly we undertake awareness initiatives as reflected in National Nutrition Week where visitors got educated on different need-based diets; Hand Hygiene programs were also conducted in schools. Orthopaedic Camp at Jamalpur and Paediatric Cardiology services to child patients with heart ailments, talk about our philanthropic endeavors. Thought-provoking articles encompassing cases from varied clinical specialties make this edition interesting. Diploma course in Cardiac Nursing, adds a feather in the cap of United College of Nursing. We wish readers a safe health in this hot humid & rainy weather.

National Nutrition Week 2018 Commemoration at United Hospital



National Nutrition Week 2018 was observed on its last day 29 April in a befitting manner; which offered complementary nutrition counseling after basic nutrition check done in a booth at hospital lobby. Mr Faridur Rahman Khan, Managing Director and Mr Najmul Hasan, CEO of United Hospital inaugurated the booth at hospital lobby in

the morning. Different types of patient diets e.g. Cardiac diet, Renal diet, Diabetic Diet, Weight-loss diet for obese patient, post partum diet etc. were displayed at the booth. Throughout the day close to three hundred patients and their family members availed free nutrition assessment and took nutrition advice from the booth.

Orthopaedic Camp at Alhaj M A Rashid Maa O Shishu Eye Hospital, Jamalpur



On 3 May, at Alhaj M A Rashid Maa O Shishu Eye Hospital, popularly known as Maloncho Chokkhu Hospital, situated at the Melandaho Upazilla of Jamalpur district, United Hospital conducted a day long Orthopaedic camp providing comprehensive bone & joint evaluation along with treatment guidelines to 112 patients. Dr A H M Rezaul Haque, Consultant Orthopaedics, led the session with a 7 member team comprising of Specialist, SHOs & Nurses along with physiotherapists. The team reached the camp site after a six hours

travel by Jamuna Express Train from Dhaka. Of the total patients, 43 were pre-screened with few lab tests and received direct consultation from Consultant Dr A H M Rezaul Haque and Specialist Dr Khaled Morshed; the remaining were referred for consultation or for Physiotherapy through EMO Dr Taufiqur Rahman. Fifty patients referred to

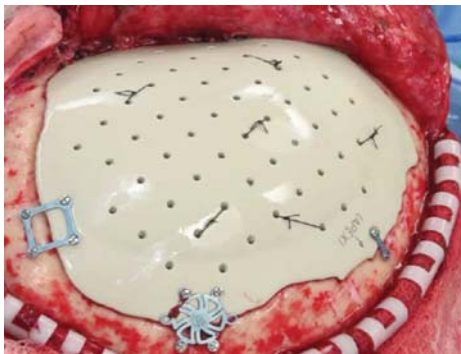
the Physiotherapist Mr Shib Prosonno Kalower, underwent self-exercise for individual physiotherapy & counselling. The orthopaedic camp was organized by United Trust.



Cranioplasty experience with Autologous bone graft vs Acrylic graft

Dr S S Ahmed, Dr Sourav Chowdhury, Dr Ahsan Mohammed Hafiz

Cranioplasty is the surgical intervention to repair cranial defects for both cosmetic and functional purpose. The history of cranioplasty dates back to 7000 B.C. Archeological findings proved that the use of inorganic materials for cranioplasty had begun before the organic materials. In 19th century, the use of bone from different donor sites, such as ribs or tibia, gained wide application.



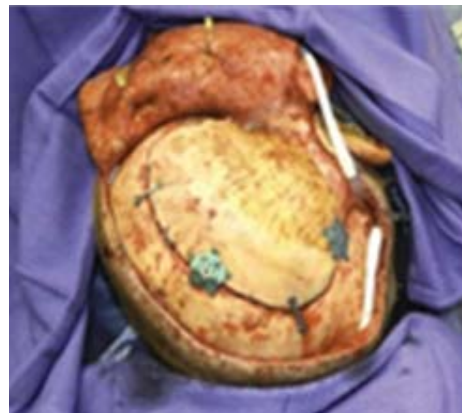
Acrylic Cranioplasty

Cranioplasty is now a well-accepted neurosurgical procedure that has application to a wide range of pathologies. The reduction of malignant intracranial pressure in the setting of traumatic brain injury (TBI), aneurysmal subarachnoid hemorrhage, and ischemic stroke can often be accomplished quickly and successfully with decompressive craniectomy. Secondary benefits may include reduction in patients' intensive care unit time, ventilator dependence, hospital stay, and long-term morbidity and mortality. Post-craniotomy infections may require removal of the infected cranial flap to eliminate the source of infection. These diverse patient groups, once recovered from the acute processes prompting craniectomy, generally require replacement of the bone flap or construction of a substitute to repair the cranial defect. Cranioplasty with either the recovered bone flap or a constructed synthetic substitute not only provides cosmetic value to patients and their families but also provides protection to the underlying brain.

Though there is no perfect material to fit all these criteria perfectly an ideal cranioplasty material should have the

following features: must fit the cranial defect and achieve complete closure, radiolucency, not dilated with heat, strong to biomechanical processes, easy to shape etc.

Given the varied need for both Autologous and synthetic cranial grafts, it is important to choose a favorite with fewer complications, as the bone is too damaged to be used again or sometimes storage facility of bones is not available in every institution. However when such facility is available, the removed craniectomy bone flap is cultured, frozen, and stored for replacement at a suitable time. But need to be discarded bone flaps with positive cultures so as to prevent future infection during cranioplasty, also the ones that have been damaged badly or contaminated due to injury, thereby requiring substitute. So many patients subsequently require cranial reconstruction with a non-autologous flap. A number of studies have retrospectively reviewed the risks of cranioplasty but have often

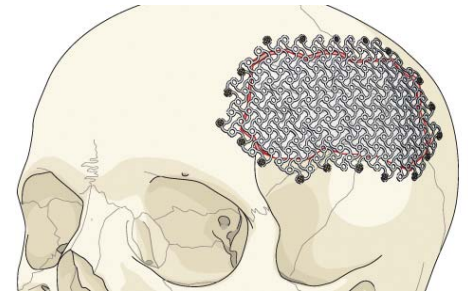


Autologous Bone Graft 2

included an amalgam of many different cranioplasty materials (including Autologous, polymethyl methacrylate, titanium, polyetheretherketone, and acrylic) with little basis for direct comparison.

Despite each of the options having their own pros and cons, acrylic grafts are primarily chosen now days, because of the cost effectiveness. Also, autologous bone grafts are more often than not involved with increased risk of infection, spontaneous resorption, and increased difficulty in maintaining the cryo-preservation. The most suitable, safe, and

satisfactory method would be the Titanium implant if it wasn't significantly more expensive. But if affordability is no problem, the patient can choose this option over the others.



Titanium Implant

The neurosurgical team of United Hospital often comes across cases that require decompressive craniectomy. With the goal to rapidly reduce the morbidity of raised intracranial pressure, as well as to allow the swollen brain some space to adequately perfuse itself, this procedure is commonly done in cases of large middle cerebral artery infarcts and other various conditions leading to a swollen brain eg. acute subdural hematoma etc. This procedure is done as an emergency, as the morbidly raised ICP may prove to be fatal if left untreated. Most of our patients have made satisfactory functionally acceptable recovery in perspective to the underlying brain lesion. Many have returned at a later date for cranioplasty. United hospital provides standard storage facilities for the removed bone flaps, which may be reinserted if done early. For cases with infected & discarded bone flaps, or cases where the surgery is delayed by a few months, cranioplasty is usually opt by using acrylic bone cement. All these cases on regular follow up have shown on observation that autologous bone flaps tend to show features of some degree of resorption, thereby creating gaps and skin depressions giving a poor cosmesis. However, none of the United Hospital cases of cranioplasty (using bone cement) have shown such complication. Based on United Hospital experiences; the use of Acrylic grafts is strongly recommend over Autologous bone graft for all cases of Cranioplasty.

Saving a Child's Heart initiative by United Trust



Patient Imran (3 years) from Munshiganj

On May 2018 three children with congenital heart anomalies had cardiac catheterization procedures done by Pediatric Cardiology Consultant Dr Rezoana Rima at United Hospital, completely complementary as the total cost was borne by United Trust, the philanthropic unit of United Group.

Imran a three years old boy from Munshiganj presented with recurrent cough & cold, who was also not growing well and having poor appetite. He was mildly pale,



Patient Sadia (10 years) from Munshiganj

weighing only 13 kg, having systolic murmur. His echocardiography showed small patent ductus arteriosus (PDA) & pulmonary stenosis. He underwent coil occlusion of PDA & balloon dilatation of pulmonary valve in cath lab successfully and was discharged on the next day of procedure.

Sadia a girl aged ten years also from Munshiganj presented with effort intolerance and she was also not thriving well. She was weighing only 15 kg, her femoral pulses were poor, precordium was bulged, recorded heart sounds were loud & systolic murmur was heard over lower left sternal border. Her echocardiography showed large perimembranous ventricular septal defect (VSD) & large PDA, shunting left to right along with severe coarctation of aorta. Her pulmonary pressure was very high. She underwent cardiac catheterization, which was done to see reversibility of pulmonary hypertension & to delineate nature of coarctation. Her pulmonary hypertension was found to be still reversible & she had discrete preductal coarctation which is very rare; thereby plan was made for her to undergo cardiac surgery very soon.

Baijid Mostakim a boy of four and half years from Jamalpur, presented with cyanosis & effort intolerance since early infancy. He was weighing only 12 kg; he

was polychthemic, having pandigital clubbing and his saturation on room air was 82%. His echocardiography showed tricuspid valve atresia, small subaortic VSD, large secundum ASD, moderate infundibular & valvular pulmonary stenosis and severely hypoplastic right & left pulmonary arteries. He underwent cardiac catheterization procedure which showed normal pulmonary artery pressure & inferior vena cava filling pressure and multiple aortopulmonary collateral perfusion of both lungs. Coil embolization of one major aortopulmo-



Patient Baijid Mostakim (4.5 years) from Jamalpur

nary collateral artery (MAPCA) was done. He also presented with right sided hydronephrosis & hydroureter & right ureter-bladder junction obstruction. Plan is made for him to undergo staged single ventricle surgical palliation for his heart problems followed by reimplantation of ureter to bladder.

Management of Transfusion Reaction (TR)

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

A blood Transfusion Reaction (TR) is a harmful immune system response of the recipient to donor's blood. Reactions can occur immediately or much later, and can be mild or severe.

Febrile non-haemolytic TRs (FNHTRs) occur due to release of granulocyte chemical mediators, presenting with shivering, chill, rigor and fever within some time after starting the transfusion. Allergic TRs occur due to allergy to donor plasma protein, white cell or platelet antigens. Like febrile reaction, this also starts sometime after starting the transfusion with urticaria and itching. Both these conditions are not life threatening and patient's vital signs remain stable. Transfusion of the same unit can be resumed after managing the patient with antipyretics, antihistamines and occasionally with corticosteroids as needed.

Haemolytic TRs (HTRs) are rare and may occur in two forms, immediate (acute) or delayed. Acute HTRs are severe and are

due to preformed antibodies in patient's serum against donor red cell antigens. It is life threatening and is considered a medical emergency. Acute HTRs are most often due to ABO blood group incompatibility and are due to transfusion of 'wrong' blood to a 'wrong' patient. Acute HTR starts immediately after transfusion of only a few ml of blood with chill & rigor, fever, dyspnoea, backache, convulsion, tachycardia and hypotension with the patients quickly going to shock. Post-reaction voided urine is red. Acute HTR is characterized by an episode of complement mediated acute intra-vascular haemolysis due to a reaction between antibody in patient serum and red cell antigens in transfused red cells, resulting in appearance of free haemoglobin in patient's plasma and urine contributing to acute kidney injury. Acute inflammatory response with release of cytokines, anaphylatoxins and tissue factors, contribute to shock, DIC and end organ

injury. Unless diagnosed quickly and managed aggressively, the majority of acute HTR cases are fatal. Management consists of stopping the transfusion, checking the donor unit and patient's identity, intra-venous fluids, corticosteroids, O₂ inhalation, antihistamines etc. Acute HTR should always be investigated for confirmation and for identification of the cause and severity. Transfused donor blood with bag and transfusion set along with post-transfusion patient's blood sample in EDTA and plain tube samples should be sent to the blood bank. Post-transfusion patient's blood should be sent for culture & urine for free haemoglobin.

Allergic and febrile TRs are common and their incidences can be reduced by transfusing blood component instead of whole blood. Acute HTR is serious and fortunately rare, which is preventable by proper identification of the donor blood and the patient.

Prevention is key to End Malaria for Good

Dr Prodip R Shah, Dr Md Iqbal Hossain, Dr Afsana Begum, Dr Md Jahangir Talukder, Dr Priyanka Bakshi

A 34 year old European gentleman, normotensive, non-diabetic got admitted in United Hospital with the complaints of high grade intermittent fever associated with generalized weakness for 7 days.

which is a combination of Artemether and Lumefantrine. During discharge he was advised to take tablet Primaquine as a radical cure of exoerythrocytic cycle of *P. vivax* (malarial parasite).

drugs that kill only the erythrocytic stage of the parasite are given. However, 'radical cure' is now achieved in most patients with *P. vivax* or *P. ovale* malaria using a course of primaquine (15 mg

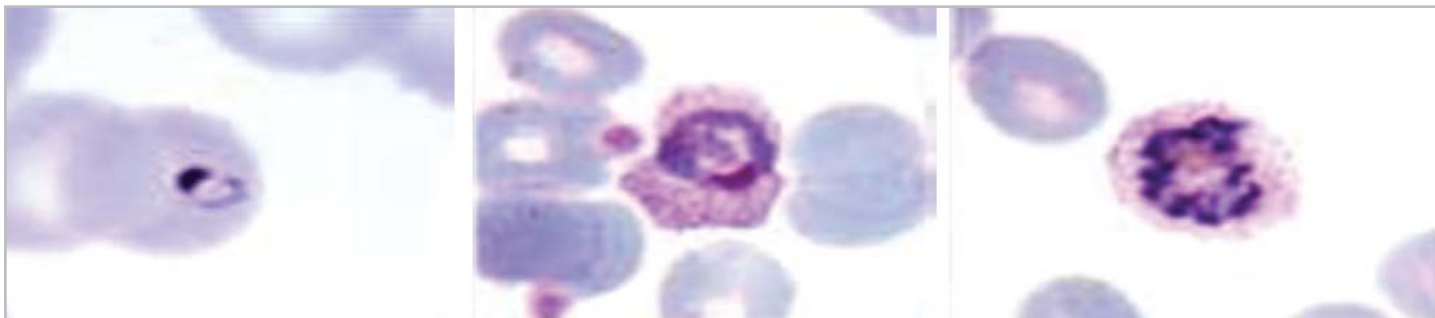


Fig : Microscopic of picture of P Vivax in RBC, Trophozoite, Schizont respectively in the histopathology slide

He gave no history of sore throat, cough, chest pain, pain during passing urine, abdominal pain and diarrhoea. He gave history of travelling to Cox's Bazar in Rohingya Camp. On examination, he was conscious, oriented, dehydrated, flushed, pulse was 88 beats/min, BP was 120/70 mm of Hg, temperature was 99°F, there was no rash and no lymph-adenopathy. His 1st and 2nd heart sound were audible with no murmur, abdomen was soft, non-tender though mild hepato-splenomegaly was present. His lab report showed, Hb to be 13.6 gm/dl, TC 7000/cmm, platelet 238,400/cmm, with peripheral blood film (PBF) showing Malaria Parasite, Trophozoites and occasional schizonts of plasmodium vivax. Mild splenomegaly was present in USG of whole abdomen. He was treated with tablet Coartem

The term Malaria originates from Italian word Malaria which means bad air. Bangladesh is one of the four major malaria endemic countries in South East Asia having approximately 34% of its population at risk of malaria. Malaria in humans is caused by Plasmodium (*P*) falciparum, *P. vivax*, *P. ovale*, *P. malariae* and the *P. knowlesi*. It is transmitted by the bite of female anopheles mosquitoes and occurs throughout the tropics and subtropics at altitudes below 1500 metres. Travellers are susceptible to malaria. *P. vivax* and *P. ovale* may persist in liver cells as dormant forms, hypnozoites, therefore being capable of developing into merozoites months or years later. Thus the first attack of clinical malaria may occur long after the patient has left the endemic area, and the disease may relapse after treatment if

daily for 14 days), which destroys the hypnozoite phase in the liver. Haemolysis may develop in those who are G6PD-deficient. *P. vivax* cannot enter red cells that lack the Duffy blood group; therefore many West Africans and African-Americans are protected. The global theme of World Malaria Day is End Malaria for Good. For prevention one should avoid mosquito bites by using mosquito repellants, insecticides, using mosquito nets, wearing long sleeves and trousers and window screens. The injectable 4 dose vaccine, called RTS, S or Mosquirix, was developed by pharmaceutical manufacturers GlaxoSmithKline for *P. falciparum*. Chemoprophylaxis should be given 1-2 weeks before traveling and should be continued for 4 weeks after leaving malaria endemic zone.

Awareness Session on Hand Hygiene



As a part of observance of International Nurses Day, United Hospital organized Awareness Session on Hand Hygiene on 7 & 15 May at two schools i.e. Drexel International School, Bonosree and

Scholastica Limited, Junior Campus at Uttara. Trained nurses of United Hospital demonstrated hand hygiene techniques to the students and a practical presentation was also given. Around 300 students

participated in the sessions from both the schools. United Hospital regularly offers hand washing guidelines and on-site demonstration to protect the health of the school community and help students.

Forequarter amputation an atypical but valuable surgical procedure for a malignant tumour of upper extremity - A Case Report

Dr Aminul Hassan, Dr A H M Rezaul Haque, Dr Masum Billah

A forequarter amputation is a radical ablative surgical procedure that includes the entire upper extremity with its shoulder girdle. This procedure was originally described in the early 19th century to manage severe, traumatic injuries of the upper extremity. Currently, the most frequent indications are the presence of malignant tumours of the arm, axilla, shoulder and scapula.

The indications include but are not limited to the following:

- There are no metastases to any other organs.
- Prognosis for treatment with chemotherapy or radiation therapy is considered extremely poor.
- Wide local excision is technically not feasible.
- The age and health of patient allows for a major surgical procedure, but not a series of reconstructive procedures.
- The tumour has significantly impaired the functional status of the extremity to complete disuse or produces severe pain.
- The patient has an unresectable invasive tumour involving the shoulder joint or neurovascular bundle.
- There has been failure of conservative therapy (radiation/chemotherapy).
- The patient has had tumour-related complications such as bleeding, sepsis, pathological fractures, limb dysfunction or severe lymphedema.

Limb-sparing surgery, preceded and followed by effective chemotherapy with or without radiation therapy, has replaced the radical surgical approach for treating limb sarcomas in most cases. Amputation of the affected

extremity was considered for many years to be the standard of care for treating and curing patients with bone and soft tissue sarcomas of the limbs.

The purpose of the present article is to familiarize surgeons with the indications for and surgical technique of this uncommon but valuable surgical procedure through presentation of a classic case report of forequarter amputation for a malignant tumour of the upper extremity.



Fig: (1) Amputated stump of left upper limb along with left scapula (top) (2) Incision marking for amputation (left bottom) (3) Huge osteosarcoma of left humerus involving surrounding soft tissues (right bottom)

A 19 year old man was admitted with comminuted fracture of proximal part of left humerus and with a large, wide spread hemorrhagic ulcer at anterolat-

eral aspect of upper arm, with a painful left upper extremity mass that had been increasing in size for previous three months. He had limited function of his arm due to mass effect and persistent, intractable pain. He also had distal neurovascular impairment of left upper limb. A complete metastatic evaluation, including magnetic resonance imaging and computed tomography, only revealed a large left upper extremity soft tissue mass surrounding the axillary vessels with multiple fracture fragments. CT guided needle-core biopsy of the mass was suggestive of malignant Osteosarcoma. After a multi-disciplinary discussion involving medical and radiation oncology, it was decided that the patient required surgical resection before radiation. He underwent forequarter amputation via an anterior approach. Surgical pathology confirmed the specimen to be malignant osteosarcoma. Post-operative bone scintigraphy showed increased abnormal radiotracer uptake in medial end of left clavicle; considering his history of illness metastasis could not be ruled out. The patient's postoperative course included six weeks of radiation. He experienced only occasional phantom limb pain, which is a common sequela of forequarter amputation.

Although forequarter amputation was initially described for the treatment of traumatic injuries, it is now more commonly used in managing malignant tumours of the upper extremity. Because this procedure is so deforming, most surgeons and patients do not select this treatment option. However, it is a relatively safe and reliable procedure for alleviating pain and improving quality of life for selected patients with unresectable tumours of the upper extremity.

United College of Nursing starts Diploma in Cardiac Nursing course

United College of Nursing has started one year Diploma in Cardiac Nursing course in 2017-2018 session. The second batch which is in 2018-2019 session, will start class within a short time. Candidates who have completed minimum one year of service as Staff

Nurse will be eligible for the course. This course is sanctioned for 20 seats and approved by both Ministry of Health & Family Welfare and Bangladesh Nursing & Midwifery Council. The objectives of the course are to prepare nurses to take responsibilities as

cardiac nurse specialist in wide range setting and for the cardiac nurses to be able to manage acute, chronic and emergency cardiac situation; also to be equipped to provide long term life supports to patients with cardiac diseases.

Department of Internal Medicine of United Hospital

Managing clinical complexity through an integrative patient-centered approach

Department of Internal Medicine in United Hospital started its function from 2007. From the very first day, the department is successfully managing all acute medical emergencies and chronic debilitating illnesses. Over the last eleven years it has made tremendous progress in terms of patient management, manpower development and technology implementation.

The department holds a vision to elevate its reputation to a significant height to spread its name and fame in the country as well as abroad.

Its mission is to continually update and maintain an international standard for

gations, internists are interested in acquiring knowledge on subspecialties which make them more efficient in handling diseases affecting a particular organ or organ system.

What makes Internal Medicine unique is the Internal Medicine physicians, who are specialists who apply their scientific knowledge and clinical expertise in diagnosis, treatment and care of adults across the spectrum of health to complex illness. Some internists choose to take additional training to subspecialize in a more focused clinical area of Internal Medicine. Fellowship in Internal Medicine is a mark of distinction which

be a challenging specialty because of the diversity and intellectual stimulation it offers to its practitioners.

At present, United Hospital Internal Medicine Department is run by 8 Consultants, 2 Junior Consultants, 3 Specialists and 9 Senior House Officers. Patients are admitted under an on-call medicine Consultant via the ED (Emergency Department) where patients are initially assessed by a medicine specialist and patients also get directly admitted through the outpatient department after visiting the respective Consultant. According to the severity of disease, patients are admitted in cabin, general



the Internal Medicine Department, where by continuous development of professional knowledge and practical skill of doctors, the patients will continue to trust that they are in safe hands.

Internal Medicine originally is the medical specialty to deal with prevention, diagnosis and treatment of adult diseases. Physicians specializing in Internal Medicine are called internists. Internists are skilled in the management of patients who have multi-system disease processes. As adult patients are often seriously ill or require complex investi-

means that the doctor has made special efforts to obtain official recognition to attain expertise through activities such as teaching, hospital appointments, public service, continuing medical education, publishing scientific articles and advanced training. Internal Medicine doctors nurture close and long-term relationships with patients, as an internist is often in charge of overall patient management. If a patient has a problem that requires specialized treatment, the internist often coordinates that treatment in conjunction with other relevant clinical specialty. Internal Medicine can

ward, special care unit, high dependency unit, intensive care unit etc. Senior House Officers are involved in taking detailed history after admission, ensuring treatments given by Consultants are carried out properly and also preparing discharge summary as per Consultant advice which are then countersigned by a medicine Specialist. Specialists visit patients daily and as required and keep Consultants updated on the condition of their patients. Hospital's Emergency department (ED) and inpatient department (IPD) receives 24 hours internist coverage throughout the year including



holidays. Outpatients get 10 hours of service from Consultants on working days. All physicians regularly take part in awareness programs and free medical campaigns which are arranged by the hospital authority.

General internists are equipped to deal with whatever medical problem a patient has - no matter how common or rare, simple or complex. They are specially trained to solve puzzling diagnostic problems and can handle severe chronic illnesses and situations where several different illnesses may strike at the same time.

In patients with co-morbidity, which do not directly point to any medical subspecialty like neurology, pulmonology, cardiology, gastroenterology, nephrology, rheumatology etc, internists see them and refer to sub specialty according to the need of patients.

Patients with special conditions e.g. pregnant mothers with other diseases are treated by Internal Medicine Consultants to save the life of both fetus and mother. Seasonal illness which may be vector borne like Dengue and Chikungunya, are also dealt successfully even

without any mortality.

Internal Medicine Consultants deal with drug interaction problems as well as this is a major problem these days for elderly patients with simultaneous illnesses like hypertension, diabetes mellitus, ischemic heart diseases, hypothyroidism, chronic kidney disease, osteoarthritis, osteoporosis etc. Here, Internal Medicine Consultant helps patients who have a long list of medicines prescribed by different sub-specialty, in making a concise list of medications to avoid drug-drug interactions.

For prevention of age related diseases, the Internal Medicine physicians counsel the patients as well. For example, control of hypertension, blood sugar and dyslipidemia helps delay development of ischemic heart diseases; avoidance of painkillers like non-steroidal anti-inflammatory drugs and correction of vitamin D will prevent osteomalacia, osteoporosis and delay progression to chronic kidney diseases. Thus the department helps achieve smooth aging of patients to live independently without depending on children, relatives or wheel chair.

CMEs (Continuing Medical Education) are organized weekly on a random basis by the department on current medical updates of different diseases. Further departmental doctors are regularly attending international scientific seminars organized by Bangladesh Society of Medicine and Association of Physicians of Bangladesh to upgrade and share their knowledge. Interesting clinical cases are published yearly in Bangladesh College of Physicians and Surgeons (BCPS) journal. Internists of United Hospital also attend central continuing medical education (CME) regularly in BCPS where they discuss their experiences and share knowledge with doctors of the entire country. Consultants and Specialists are also regularly attending international seminars at home and abroad. Senior House Officers of this department get basic training in diagnosis, treatment of disease and management of complications of diseases and drugs. This training helps them to qualify for post-graduation degree.

Internal Medicine physicians being specialist physicians, are trained to manage particularly complex or multi-system disease conditions that single-organ-disease specialists may not be trained to deal with. They tackle patients with undifferentiated clinical presentations that cannot be easily fitted within the expertise of a single-organ specialty. They further manage serious acute illnesses that affect multiple organ systems at the same time in a single patient, and also multiple chronic diseases or comorbidities that a single patient may have. Internal Medicine department plays a central role by providing patients with high-value care and also enabling them to understand the decisions taken about their care.



A 13 year old boy with PANDAS Syndrome

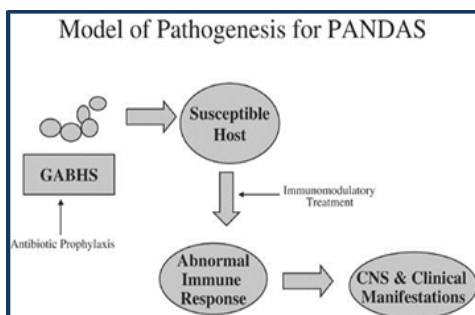
Professor Md Salim Shakur, Dr Sharmin Afroze

There are many neurologic disorders those affect children after an episode of viral or bacterial illness. Among them PANDAS is a rare condition which refers to pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections. It is a fairly recently described disorder (1990) and found in one among 200 children every year. An autoimmune response to a streptococcal infection is the leading cause of PANDAS. Multiple risk factors may play a role in the development of PANDAS, including recurrent group A streptococcal infections, family history of rheumatic fever, and the mother's history of having an autoimmune disease.

PANDAS is more common in boys and prepubertal children. The symptoms are similar to those of obsessive-compulsive disorder (OCD), attention deficit hyperactivity disorder (ADHD), and motor or verbal tics. Other symptoms include separation anxiety, mood changes and changes in handwriting, bedwetting or change in urinary frequency, and sleep disturbances. Symptoms tend to appear suddenly, and the recovery period is variable.

Diagnosis is mainly based on history and clinical examinations rather than other specific studies. First-line treatments for PANDAS include cognitive behavioral therapy (CBT) and medication, depending on the breadth and severity of symptoms. Antibiotics are the treatment of choice to eradicate an active strep throat infection. Untreated or unrecognized PANDAS may increase the risk of having OCD and tic disorder into adulthood.

Similar to the above mentioned features, a 13 year old boy from USA was admitted in United Hospital whose history revealed him to be completely normal 3 years back. Then he suddenly developed flu like features associated with cough



and sore throat for 7 days. He recovered spontaneously but parents noticed that there was a change in behaviour and gradually it was increasing. He developed occasional irritability with mood swing, sleep disturbance and obsessive-convulsive disorder. He was clinically suspected for PANDAS syndrome and was on prolonged antibiotic prophylaxis along with clonazepam. But 9 days prior to his arrival to Bangladesh he developed convulsion and immediately was brought to United Hospital.

He was managed accordingly and convulsion stopped. Convulsion takes place mostly due to drug withdrawal, as on query it was revealed that clonazepam was stopped by the parents. Although he was stable, his reciprocal interaction was not satisfactory as he had mood swing and impulsive behavior. At present he showed more of behavioral, cognitive and pervasive clinical features rather than genuine neuropsychiatric features like movement disorder, tics or chorea. The EEG and MRI of brain did not reveal characteristic features like large basal ganglia; even then diagnosis was not changed because PANDAS is mostly a clinical diagnosis. In addition the diagnosis was confirmed by laboratory investigation of specific components of antibody based on ganglion of brain.

The course of the disease and progressive worsening of cognitive impairment is suggestive of PANDAS though the resolution is variable.



Relocation of Sylhet Information Centre of United Hospital

Information Centre of United Hospital in Sylhet was shifted to its new location on 1 July. The new location of the centre is at 21 Niloy Gour Govinda Tila Road, Chowhatta, Sylhet. From now onwards two doctors from United Hospital will visit regularly Sylhet Information Centre on weekly basis to provide consultation to the local patients. This centre will also have telemedicine service through which patients sitting in information centre will be able to avail consultation from Consultants sitting at their chamber at United Hospital. The centre will also provide regular services i.e. doctors appointment, coordination for arranging cardiac ambulance support to bring patients from Sylhet to Dhaka and also any other hospital information and services.



Use of bilateral internal mammary artery (BIMA) in off-pump coronary artery bypass (OPCAB): United Hospital Experience

Dr Jahangir Kabir, Dr Rezaul Hasan, Dr Nizam U Ahmed, Dr Sayedur R Khan, Dr Arif A Mohiuddin

Complete revascularization and arterial grafting are associated with improved long-term outcomes after coronary artery bypass grafting (CABG). Amongst the arterial grafts, the superiority of the internal mammary artery as a graft in CABG is widely accepted with documented excellent long-term results. Accumulating evidence in recent years has demonstrated the superiority of bilateral internal mammary artery (BIMA) grafting over single internal mammary

A retrospective cross sectional study was conducted in which all patients underwent bilateral internal mammary artery (BIMA) grafting for off-pump coronary artery bypass grafting (OPCAB) only at United Hospital from January 2013 to December 2017. During this period total of 476 consecutive patients who underwent OPCAB using bilateral skeletonized IMAs as Y grafts (group I, n = 247) or in situ grafts (group II, n = 229) were studied.

group I (3.72 ± 0.93 and 2.33 ± 0.61) than in group II (3.48 ± 1.12 and 2.22 ± 0.52). But the difference between these two groups was not statistically significant ($p=NS$). Both operative time (5.03 ± 1.05 vs 4.87 ± 1.14 Hours) ($p=0.522$) and ICU stay (3.04 ± 1.38 vs 3.48 ± 1.50 Days) ($p=0.26$) were similar in both groups. There were no statistically significant differences in postoperative complications including re-opening for bleeding (3.64% vs 3.05%), perioperative myocardial infarction (3.8% vs 1.31%), arrhythmia (8.1% vs 4.3%), sternal wound infection (1.2% vs 0.8%), stroke (0.0% vs 0.0%), renal failure (0.0% vs 0.4%) and respiratory complication (0.4% vs 0.8%) between groups I and II ($p = NS$).

Y-graft

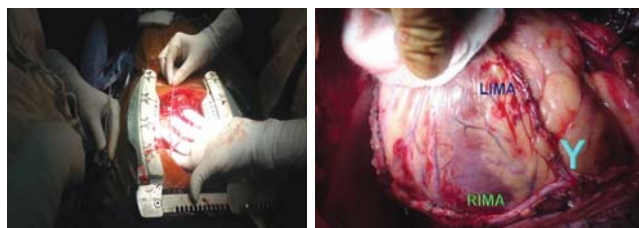


Fig-1: (a) making LIMA-RIMA Y-graft (b) LIMA-RIMA Y-graft

In situ graft

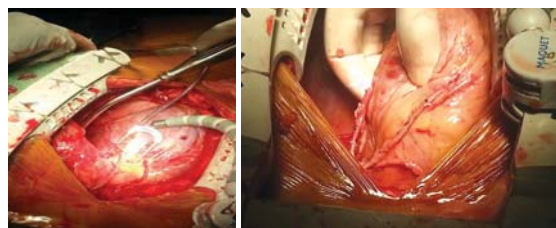


Fig-2: (a) RIMA to LAD and LIMA to OM (b) LIMA to LAD and RIMA to OM

artery grafting in terms of survival, event-free survival, and freedom from re-intervention. Despite their well-established advantages, bilateral internal mammary arteries (BIMA) are still largely underused. This is partly because of the technical complexities associated with the use of the right internal mammary artery (RIMA) to guarantee the universally accepted gold standard i.e. left internal mammary artery (LIMA) to left anterior descending artery (LAD) graft. Several surgical strategies have been used to achieve left-sided myocardial revascularization with BIMA grafting. These include in-situ right internal mammary artery (RIMA) to the left anterior descending (LAD) and the left internal mammary artery (LIMA) to circumflex marginal branches (LCx), directing the RIMA through the transverse sinus in a retroaortic course, and free RIMA graft connected proximally either to the LIMA (composite grafting) or to the ascending aorta. Each one of these surgical strategies for BIMA grafting has its merits and demerits. The early and mid-term clinical outcomes after off-pump coronary artery bypass grafting (OPCAB) using bilateral internal mammary arteries (BIMAs) as in situ grafts with those using BIMAs were compared as a Y-composite graft.

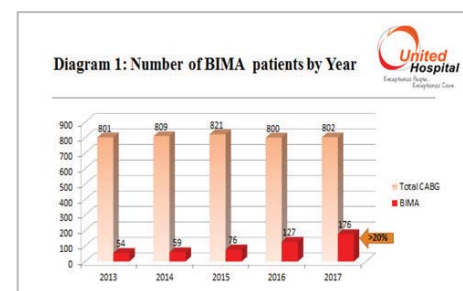
During the study period, both right and left internal mammary artery were harvested by skeletonization technique. One internal mammary artery (IMA) was used to bypass left anterior descending artery (LAD) and second IMA was used to bypass either circumflex marginal branches (LCx) or right coronary artery (RCA) using Y grafts or in situ grafts according to surgeon preference based on position of targeted vessels. All grafting were done on off-pump coronary artery bypass grafting (OPCAB).

Out of 476 patients, 457 (96%) patients were male. Patients had a wide range of age from 28 to 72 years with the mean age being 48.73 ± 8.42 years. Among the cardiac risk factors, hypertension (70.1%) and smoking (56%) were most common followed by diabetes (41.81%). Chronic kidney disease (6.0%), calcified aorta (3.7%) and chronic obstructive pulmonary disease (3.7%) co-morbidity were present in these patients. Majority (64.3%) of patients had triple vessel disease (TVD) and 17.8% patients had TVD with LMD. 3.9% patients had low LVEF ($<40\%$) There was no in-hospital mortality in both groups. Both the total number of graft per patient and the number of distal anastomoses using arterial conduit (BIMA) were higher in

group I (3.72 ± 0.93 and 2.33 ± 0.61) than in group II (3.48 ± 1.12 and 2.22 ± 0.52). But the difference between these two groups was not statistically significant ($p=NS$). Both operative time (5.03 ± 1.05 vs 4.87 ± 1.14 Hours) ($p=0.522$) and ICU stay (3.04 ± 1.38 vs 3.48 ± 1.50 Days) ($p=0.26$) were similar in both groups. There were no statistically significant differences in postoperative complications including re-opening for bleeding (3.64% vs 3.05%), perioperative myocardial infarction (3.8% vs 1.31%), arrhythmia (8.1% vs 4.3%), sternal wound infection (1.2% vs 0.8%), stroke (0.0% vs 0.0%), renal failure (0.0% vs 0.4%) and respiratory complication (0.4% vs 0.8%) between groups I and II ($p = NS$).

complication (0.4% vs 0.8%) between groups I and II ($p = NS$).

In conclusion the results demonstrated that OPCAB using bilateral skeletonized IMAs is technically feasible with excellent graft patency. Using bilateral skeletonized IMAs as Y grafts increases the number of distal anastomoses. There was no significant difference found in terms of mid-term survival or freedom



from repeat revascularization between two configurations of BIMA use. Based on these findings, the simplest technique, determined by individual patient characteristics, should be selected. A long-term follow-up should be done to assess the cardiac event-free survival of these individuals evaluating the long-term implication of the procedure and hence its applicability as a routine for coronary artery bypass grafting in the present settings.

Corporate Agreement Signing and Facility Tour

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



- Maritime Entrepreneurs PTE Ltd. (MEPL)
- Guardian Life Insurance Limited (GLIL)
- International Textile Procurement Services (Bangladesh) Limited (ITPS)

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

- US Embassy, Dhaka on 17 April
- Nestle (Bangladesh) Limited on 25 April

18th Antenatal Class for Expectant Mothers

As part of patient education and consequent value addition to the treatment, United Hospital organized 18th Antenatal Class under the supervision of Obstetrics & Gynaecology Department. It was a class of 1½ hours of duration or more held on 21 April. Participants were pregnant mothers with a companion (husband or mother, etc) who are availing UHL Obstetric prenatal care. Dr Afsari Ahmed, Junior Consultant, Obstetrics & Gynaecology Department, Ms Zakia Khandoker, Dietitian, Ms Umme Kulsum Lizu, Clinical Physiotherapist and Ms Nasrin Akhter, Senior Staff Nurse of United Hospital gave presentation on various topics. Consultants of Obstetrics & Gynaecology Department inaugurated the session.



Health Awareness Talk



As part of CSR activities & to commemorate World Health Day, United Hospital Limited organized an awareness session on Health for All at the corporate office of Citibank N.A. on 11 April. Further on the occasion of Holy Month of Ramadan three awareness sessions were organized on Eating Healthily during the month of Ramadan; two sessions in DAMCO & another was at Gemcon Group on 25 April & 13 May respectively where Chowdhury Tasneem Hasin, In Charge, Dietetics & Nutrition Department delivered presentations.



Scientific Seminars



In this quarter total 4 seminars were held starting with Role of Plasmapheresis in Critical Illness on 19 April where Dr Md Mizanur Rahman Chowdhury, Specialist, Blood bank, delivered presentation, Dr Afsana Begum, Consultant Internal Medicine Department delivered her presentation on Auto Inflammatory Disease-New Challenge in Clinical Medicine in the seminar held on 26 April to commemorate World Health Day followed by a seminar on 3 May on Newborn Screening & Nutrition. To commemorate World Asthma Day a seminar was held on 10 May on Bronchial Asthma updates where Dr Khan Md Sayeduzzaman, Consultant Respiratory Medicine & Chest Diseases Department delivered key note presentation.



Outbound Knowledge Sharing Seminars

Prof Dr Anisur Rahman, Consultant General & Laparoscopic Surgery Department, attended Live Surgeons Workshop & Academic Symposium organized by International Hernia Collaboration (IHC) at New Delhi from 3-5 May. The theme of the event was Troubleshooting Hernia Surgery. The International Hernia Collaboration is the world's largest hernia community, which consists of more than 5000 advanced hernia surgeons of the world.



Dr. Sharif Ahmed, Junior Consultant Oncology attended IAEA fellowship training program on Radiation Oncology from 14 May to 8 June at National University Cancer Center of National University Hospital (NUH), Singapore.



Consultant, Dr Nargis Ara Begum and Specialist, Dr Sharmin Afroze from Neonatology & Pediatrics department attended International Neonatology Association Conference, 2018 held in Ghent, Belgium from 22-24 June. Dr Nargis presented a paper on Persistent

Pulmonary Hypertension in Newborn: Experience of United Hospital and Dr Sharmin talked about birth defect in neonates.

Dr Nazmul Islam, Consultant Endocrinology, attended American Association of Clinical Endocrinologists (AACE) meeting at Boston, USA from May 18-23 where around 13000 participants from all over the world attended.



Dr Tanveer Bin Latif, Consultant Nephrology attended the 55th ERA-EDTA Congress facts and figures held at Copenhagen, Denmark from May 24-27 where total number of participants from all over the globe, was around 7000.



Training & Workshop



Mr Amit Gomes & Mr Mainul Islam, Customer Relation Officers attended a workshop on "Customer Relationship Management (CRM)" which was arranged by Dhaka Chamber of Commerce & Industry (DCCI) held from May 25-26.

On 10 June Certificate of Appreciation was given to Resource Persons for their contribution to Staff Training of the hospital to improve Standard of Patient Care. In a ceremony arranged by Training Wing of HR department, total 20 recipients including doctors, nurses and staff from different departments were awarded certificates



UCN News

United College of Nursing (UCN) arranged a curriculum development workshop for Post Basic B.Sc. Nursing Final Year students, which took place from 13 to 16 May concluding with the attendees final presentation. Prof Dr Humayun Kabir Talukder of Curriculum Development & Evaluation of Centre for Medical Education and Secretary General, Association for Medical Education were present to enrich the workshop.



Dr Sharmin Afroze, Neonatology Specialist attended two days Training /Surveillance Workshop on National Neonatal Perinatal Database (NNPD) and Newborn Birth Defect (NBBD) Surveillance in Bangladesh held in Institute of Public Health (IPH), Mohakhali from 4-5 April; as a member of participating center, United Hospital.



A day long for the 2nd Advanced Cardiac Cath Lab Nurse and Technologists Symposium was held on 28 June at Pan Pacific Sonargaon Hotel, Dhaka organized by Bangla Interventional Therapeutics (BIT). Dr Kaiser Nasrullah Khan, Consultant, Cardiology, five Cath Lab Nurses and six Technologists attended the program from United Hospital where total participant number was 250.

New Consultant



Dr Reyan Anis
MBBS (DMC), MRCP (UK)
Department of Cardiology

Congratulations to the Newly Weds on their Marriage

- Staff Nurse Mousumi Khatun got married to Md Bashir Uddin Shopon on 13 April
- Senior Executive, Media and Public Relations, Marketing Department Md Sajjadur Rahman Shuvo got married to Saiky Alam Mou on 4 May



Congratulations & Best Wishes to the following Staff and their Spouses

- CHDU Staff Nurse Flora Halder of was blessed with a daughter Tinika Myra on 2 April
- GICU Staff Nurse Dilruba Siddika was blessed with a daughter Adiba Ibnath on 10 April
- Staff Nurse Shilp Thakni of CICU was blessed with a daughter Kashfiya Islam on 6 May
- OT Staff, Technician Md Arif Hossain was blessed with a son Sad-Al-Adel on 5 June



Condolence & Prayers

- Customer Relation Officer Thamina Akter lost her mother Mrs Rashida Begum on 28 May
- Customer Relation Officer Mohammad Nuruzzaman lost his mother Mrs Nurun Nahar Zaman on 3 June
- Staff Nurse Kalpona Akter of CICU lost her brother Mr. Md. Mobarak Ali on 3 June
- PCA Liton Khalifa of 3rd floor in Nursing Department lost his father Mr Md Ayub Ali Khalifa on 6 June

Eid Mubarak



International Nurses Day 2018



United Hospital observed International Nurses Day on 12 May keeping in line with the global occasion to encourage the nursing profession to maintain the spirit of serving humanity. On that day a rally was held by United Hospital nurses along with students of United College of Nursing. This was followed by a cake cutting ceremony. Flowers and get well cards were distributed to the admitted patients afterwards.

Free Health Check-up was conducted in a health check booth at hospital lobby, where more than 500 patients and their family member's availed free check up. Mr Najmul Hasan, CEO inaugurated the health check booth at hospital lobby in presence of hospital doctors, nurses and other officials. He congratulated the nurses on this joyous occasion and gave an encouraging speech to motivate them to do better work with more dedication in the coming days.

