CK BIRLA HOSPITALS

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Capsule

Clinical Newsletter



2016

From the CEO's desk

Dear Doctors,

Bringing warm wishes for the festive season to you and your family!

It gives me great pleasure to share with you the inaugural edition of **Capsule**, the clinician newsletter of CK Birla Hospitals. This is a platform to share with you the great and exciting clinical work that our consultants are doing across different specialities.

We at CK Birla Hospitals, one of Indias oldest and Eastern India's premier healthcare destination have embarked on an exciting transformation journey to be at the forefront of medical advancement and excellent patient outcomes. Our Doctors are the leaders in the transformation journey and capsule is a testimony to that, showcasing their expertise in providing excellent clinical care to patients referred by you.

This newsletter will focus on new procedures, new technologies and share our efforts in organising CME and most importantly carry testimonials from our patients.

We remain committed to our vision of consistently providing healthcare excellence with passion, empathy and clinical quality. We are indebted to you for reposing your faith in us by referring your patients for treatment at our hospitals. We invite you to kindly share your views on the **Capsule** on how it can be refined and made more meaningful.

Best wishes from the entire team at CK Birla Hospitals.

Mr Uttam Bose
CEO, CK Birla Hospitals

Content

Short Forms: ▪ CMRI-Calcutta Medical Research Institute ▪ BMB-BM Birla Heart Research Centre ▪ RBH-Rukhmani Birla Hospital ▪ AHFC-Advanced Heart Failure Clinic ▪ PSA-Prostate-Specific Antigen ▪ TRUS-Transrectal ultrasonography ▪ ACTH-Adrenocorticotropic Hormone ▪ BMI-Body Mass Index ▪ HIV-Human Immunodeficiency Virus ▪ WHO-World Health Organisation

In focus

Advanced Heart Failure Clinic Inauguration

BMB organised its Advanced Heart Failure Clinic on 25th June 2016 that was attended by Dr Smt Sashi Panja, Minister of State (In Charge), Women and Child Development, Social Welfare, Govt. of West Bengal and Dr Bhabatosh Biswas, Vice-Chancellor of West Bengal Health University. The AHFC was led by Dr Siddharth Sarangi, Consultant Cardiac Surgeon and a team of the most renowned and skilled cardiologists, cardiac surgeons and cardiac rehabilitation experts. Mr Uttam Bose, CEO, CK Birla Hospitals shared the inspirational journey of the 28 years of BMB and its remarkable practices on cardiac care and service to the community.

In focus

BMB Walk for your heart

On 25th September 2016, celebrities and people from all walks of life walked from Mohor Kunja to BMB. The walk was interspersed with entertainment that kept the moods of the walkers upbeat. The purpose was to propagate a healthy lifestyle. Mr Uttam Bose, CEO, CK Birla Hospitals, Popular actor Paoli Dam, music composer Debojyoti Mishra, singer Soham along with our team of eminent heart specialists and surgeons unfurled the flag and set their first foot forward, to walk for their heart!

In focus

Spine Workshop

Spine workshop, the Annual Conference of the Neuro Spinal Surgeons Association of India was organised at ITC Sonar from 16–18 September 2016. The conference was attended by Dr Smt Sashi Panja, Minister of State (In Charge) Women and Child Development, Social Welfare, Govt. of West Bengal. The conference proved to be a success as many foreign dignitaries and experts on Neuro Spine attended the event and shared their knowledge and expertise.

Best Social Media Campaign Award

CK Birla Hospitals bagged the 'Best Social Media Campaign (Best Practices)' at the prestigious #EngageDigitalSummit2016, organised at ITC Sonar for its immensely successful **World No Tobacco Day** campaign.

In focus

Red Carpet

Doctors' Day celebrations could not be observed in a better way. The Real Stars of the hospital were treated no less than the Reel Stars. Music, fashion, cocktail and dinner made the event memorable.

In focus

RBH Walkathon-2016 on World Heart Day

World Heart Day 2016 was celebrated with robust participation in Jaipur. RBH along with Times of India Jaipur and BSNL had put up a successful event supporting Healthy Heart. Senior consultants from RBH Jaipur, Dr Budhyaditya Ranabir Chakraborty, Cardiologist and Dr Rudradev Pandey, spoke on the importance of regular exercises. The walk was attended by distinguished personalities who equally participated in the walk to support the cause. Colonel Suresh Prabhu (Commanding Officer, NCC, Jaipur) and Ramesh Chandra Arya (Chief General Manager BSNL) along with the OP Gupta (General Manager BSNL) were all a part of the Walkathon. The event was successful in sending across the message of 'Healthy Heart' to the whole of Jaipur city.

Patient Experience

Gastroenterology

Patient: Mr Debajit Banerjee
Doctor: Dr Sabyasachi Pattnaik

"I appreciate Ms Arati Das (senior executive guest relation) for her unparalleled patient service particularly in the last 2 days of my 7 days treatment in CMRI. I observed that her services were just not limited to me but extended to all patient queries over the phone and counter. She provided a proper resolution with enthusiasm, empathy and utmost care. She showed much efficiency in handling people, patients and doctors along with her own official deskwork, which I found were superior to her peers working in the hospital. I want to thank her for providing such delightful customer service. I wish her the best through her journey in CMRI."

Internal Medicine

Patient: N C Singh
Doctor: Dr Sujoy Mukherjee

"Quality of services and food are very satisfactory. I wish the institute a successful journey as the warmth displayed in their behaviour is worth mentioning. I didn't know anyone personally but the service of the staff left me quite satisfied."

Obstetrics and Gynaecology

Patient: Suhrita Halder
Doctor: Dr Samir Kumar Ray

"I am very happy with the cooperation and behaviour of the sisters in the labour room. I was encouraged by their cooperation and congeniality. I am thankful that I made the right decision to come to this hospital."

Patient: Kashvi Agarwal
Doctor: Dr Ruchi Golash

"Everything is so perfect here which includes the food, hygiene, staff and attendants. Everyone is doing his/her job with politeness and perfection. I am extremely happy with Dr Ruchi Golash's treatment. A special mention for Soma di who had attended on me 4 years ago and has now become a well-deserved supervisor and also Sraboni di for her care and support. I would like to mention the super efficiency level of the night shift staff."

Paediatrics

Patient: Tammana Khatoon
Doctor: Dr Susmita Banerjee

"Dr Susmita Banerjee is a very good doctor. I am very pleased with her treatment. My daughter is much better now, thanks to her."



Patient Experience

Cardiology

Patient: Chandana Bose
Doctor: Dr Anil Mishra

"Special thanks to Dr Mishra, Dr Tanuja, Dr Gourav Ghosh, Dr Sadhu and Dr Sanjay"

Patient: S R Deo
BMB

"I am extremely satisfied with the behaviour and excellent service provided to me by the nurses, staff and doctors. The hospital maintains the perfect hygiene."

Patient: Mrs C. Mehta
BMB

"I had a very pleasant stay here. I am thankful to Dr Dutta and all the other doctors and nurses who supported my treatment. However, if I was provided Gujarati food it would have left me happier."

Patient: N Agarwala
BMB

"I received excellent treatment from the extremely humble and generous staff. Very good service."

Patient: Hemant Lakhani
BMB

"I must have been extremely lucky to be here. They saved my life! It is indeed a temple for heart patients where doctors and nurses are messengers of God and work with tremendous love and care to deliver proper treatment. The entire staff of BMB is very supportive and works day and night with vigour to get patients cured. The smile on their faces are never lost. I wish the hospital succeeds in its endeavour of their untiring services towards the patients who most always are discharged with a smiling face."

Patient: Mriganka Das
Doctor: Dr RK Das and Dr SS Das

"I am impressed with the behaviour of the nurses and staff of BMB. I am especially thankful to Dr SS Das (Cardiologist) and Dr RK Das (Cardio Surgeon). They were God sent and were responsible for giving my father a new life. The receptionist Ms Moumita was extremely helpful. I will never hesitate to come here for treatment in the future and will continue to entrust my faith on the skills of these two wonderful doctors."
As written by Mriganka Das's elder son.



Women more prone to joint replacement and fractures

Dr Rajiv Chatterjee
M.B.B.S, D.Orth, MS(Orth),
DNB (Orth), F.R.C.S.

In this article, renowned orthopaedic surgeon Dr Rajiv Chatterjee at The Calcutta Medical Research Institute tells us why women are more prone to knee and joint issues and what they can do about it.

Dr Chatterjee sees almost 70:30 ratio of joint replacement between women and men and 75:25 ratios of fractures. He explains knee and joint health in women through three stages in her life.

He says, women tend to have weaker bones earlier and are more prone to wear and tear over the years and the reasons for this are multifactorial. Hormones and hormonal changes throughout her life rule a woman's body. Women are more prone than men to have conditions that cause joint pain, experience hormone fluctuations that affect their vulnerability to knee and joint issues. Also with changing lifestyles and rapid urbanisation, the stress on the women's body and especially her joints and bones has increased greatly. The majority of Indian women who don't lead West influenced lifestyles squat more over household chores etc. In non-urban areas, women are seen squatting in front of a coal burner to cook. This constant squatting also takes a toll on their knees. This lifestyle also predisposes them to have soft and worn out bones. Therefore a combination of factors results in women being more prone to fractures and joint replacements.

It is important to put in place preventive measures from a very early age to ensure that the next generation of women is less likely to have bone and knee injuries, decreased fracture and replacements. The education and awareness should start with teenage girls. The next generation of women should be educated to understand that household work must be shared with their partners and children. Sharing the load will ensure less stress in the joints and bones.

Women should ensure proper dietary habits which include dairy products and regular meals. A regular exercise habit should also be cultivated. Women also need sunlight exposure to strengthen her bones. Sunlight is the best source of Vitamin D and women should be encouraged to get sunlight exposure in the mornings between 8–10 am.

Post 30, it has been seen that women tend to put on more weight than men, especially, if the woman has had her first child. Therefore it is essential for women to keep the weight under check between 30-40 years of age while continuing a balanced diet, regular exercise and sun exposure.

Post 40, when women reach menopause, either naturally or surgically, it is imperative to consult a gynaecologist to check if there is a need for hormone replacement therapy. At this age, women should consult a doctor to start off oral calcium supplementation on an on-off basis. At about 45–50 one should get regular check-ups for the bone to analyse bone health as a constantly preventive measure.

Medical Milestones

■ Free yourself from the extra burden with Bariatric Surgery

Dr Vishnu Kumar Bhartia
Bariatric Surgeon
FRCS, FICS

There are many who find themselves struggling with severe obesity and do not know how they can shed their excessive weight. Bariatric surgery includes a variety of procedures performed on people suffering from obesity. Weight loss is achieved by reducing the size of the stomach with a gastric band. A portion of the stomach is removed by resecting and re-routing the small intestine to a small stomach pouch, (Gastric Bypass Surgery). Long-term studies show that the procedure can cause significant weight loss, recovery from diabetes and improvement in cardiovascular risk factors. CMRI is proud to be one of the few hospitals in Eastern India to facilitate obesity management through Bariatric Surgery.

How is the Body Mass measured?

Body Mass Index - WHAT DOES IT MEAN?

BMI	22.5 to 27.5	Overweight
BMI	27.5 to 37.5	Obese
BMI	37.5 and Over	Severely Obese

When is surgery needed?

For those who are severely overweight (roughly 30 kg or more than ideal and have been unsuccessful at dietary/behavioural approaches to weight loss, a Laparoscopic Weight Loss Surgery may be considered). Surgery is recommended if the BMI is 37.5 or BMI is above 32.5 with co-morbidities like Diabetes, Sleep Apnea, Insomnia and Depression etc.

Conventional ways of losing weight are diet and exercise, which is a temporary development, and the lost weight comes back adding extra pounds. For those who are seriously overweight, losing weight is not just cosmetic. Abdominal fat or visceral fat is metabolically active and secretes hormones that lead to Inflammation, heart diseases, diabetes etc. In addition, excessive weight diminishes almost every aspect of health from reproductive and respiratory function to memory and mood. It also interferes with sexual functions. All these co-morbidities can be improved or cured by Bariatric Surgery.

Permanent cure for Diabetes

Obesity Surgery, which is now called Metabolic Surgery is the best and guaranteed means of diabetic control in 80% of patients.

Evaluation

Routine Tests are done prior to surgery on all patients to evaluate preoperative co-morbidities and the surgery is planned accordingly to avoid complications and ensure a safe postoperative period.

Laparoscopic Sleeve Gastrectomy

In this procedure, the stomach is divided vertically and converted into a narrow tube(the size of a banana) capable of holding 80 to 90 ml. of food at a time.

LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS

Gastric Bypass involves creating a small pouch by dividing the stomach. The small intestine is divided and is joint with the new stomach pouch. This allows the food to go straight from the stomach pouch into the small intestine, which causes it to bypass the lower stomach and the duodenum (the first segment of the small intestine). This process greatly reduces a number of calories the body absorbs. This is the most effective weight loss procedure.

Mini Gastric Bypass

The Mini-Gastric Bypass (MGB) is a recently introduced procedure being increasingly adopted in many countries around the world. During this surgery, the stomach is divided and a small stomach is created holding 200 to 250 ml of food at a time. A portion of the intestine is joined to the divided portion of stomach creating passage for food to pass into the intestine.

Results of Bariatric Surgery

The effectiveness of Bariatric Surgery depends on the success of the surgical procedure and the ability of the patient to change the dietary or eating behaviour. Patients choosing Bariatric Surgery have to be committed to long-term lifestyle changes, including dietary and behavioural modifications. Patients can expect gradual weight loss up to 2 years. They may lose up to 70-80 % of their excess weight within 18 months after the surgery.

Medical Milestones

Rare Pituitary Tumour treated at CMRI

Dr Soumitra Ray
Consultant Neuro Surgeon
MBBS, MS, MCh (Neurosurgery)

A 15-Year-old girl from Bangladesh came to Dr Soumitra Ray at The Calcutta Medical Research Institute (CMRI) complaining of puffiness of the face increasing Central body mass. She also showed hyperpigmented skin markings typical of the disease called stria purple markings on her body. Her blood reports showed her cortisol levels to be high. MRI scan revealed a tumour in the pituitary gland. It was a 5-mm. size tumour. Dr Roy read the symptoms and diagnosed it as Cushing's Disease.

Cushing's Disease is an extremely rare condition seen only in 10-15 cases in a million. Sighted mostly in women, it is not so common in children. A type of pituitary tumour called adenoma grows in the pituitary gland located at the centre base of the brain. The tumour is usually benign (not cancer causing). With Cushing's Disease, the pituitary tumour secretes an excess hormone called ACTH. ACTH stimulates production and release of cortisol, a hormone usually released during stress. Too much ACTH causes the adrenal glands to make too much cortisol. It controls the use of carbohydrate, fat, and protein used by the body. It also helps reduce the immune system's response to inflammation.

The treatment for Cushing's Disease involves surgical removal of the pituitary tumour. After removal, symptoms gradually disappear and hormone levels stabilise within six months.

Dr Roy decided to perform the surgery on the 15-year-old girl. The approach to the tumour was made through the nose to ensure the least damage to the brain avoiding complications. The tumour was exposed and removed. The patient was discharged within 5 days.

Cushing's Disease is a rare condition, and there can be complications in the surgery. Since the pituitary gland controls several hormonal functions, one has to ensure that no other hormonal complications are caused. Therefore, during diagnosis and treatment, a team of highly skilled medical specialists including surgeons, anaesthetists, endocrinologist must be present.

Radical Prostatectomy – The gold standard for prostate cancer treatment

Dr Amlan Chakraborty
Consultant Urologist
MS, FRCS

With India's rising demographic age the risk of prostate cancer in males has also increased but with better healthcare facilities this problem is more efficiently handled now. Currently, it is the most prevalent form of cancer in males above the age of 50 in India. Since prostate cancer often has no early symptoms, it is now mandatory to check for PSA levels in male patients above the age of 50. If tests indicate PSA levels above 6 then those patients must be investigated immediately for the risk of prostate cancer. A digital rectal exam, repeat PSA with TRUS biopsy of prostate usually helps to determine early prostate cancer.

As is the case if any form of cancer, it must be detected early for maximum chances of successful treatment. Removal of the whole CF prostate gland or radical prostatectomy at an early stage is the gold standard of treatment. The surgery can be done conventionally, in an open procedure or laparoscopically. Laparoscopic surgery may be done by hand. However, some doctors now do it by guiding robotic arms that hold the surgery tools. This is called robot-assisted prostatectomy.

For laparoscopic surgery, the surgeon makes several small incisions in the belly. A lighted viewing instrument called a laparoscope is inserted into one of the incisions. The surgeon uses special instruments to reach and remove the prostate through the other incisions. The main goal is to either open or remove cancer through laparoscopic surgery. Sometimes it means completely removing the prostate and the tissues around it. While this may seem like a simple surgery, complications may occur. Therefore, it is always best to choose the skilled surgeon for the surgery and a hospital that is equipped to handle such cases.

Radical prostatectomy is generally effective in treating prostate cancer that has not spread outside the prostate or localised prostate cancer. Following surgery, this stage of cancer can be determined based on how far it has spread. PSA levels can drop to zero if the surgery successfully removes cancer and cancer have not spread. If cancer has spread, advanced cancer may develop even after the prostate has been removed.

At The Calcutta Medical Research Institute (CMRI) radical prostatectomies are being successfully practised for some time now. The procedure on an 80 years old patient has delivered the desired results. Make sure that the right hospital and doctor are chosen before going ahead with the surgery.

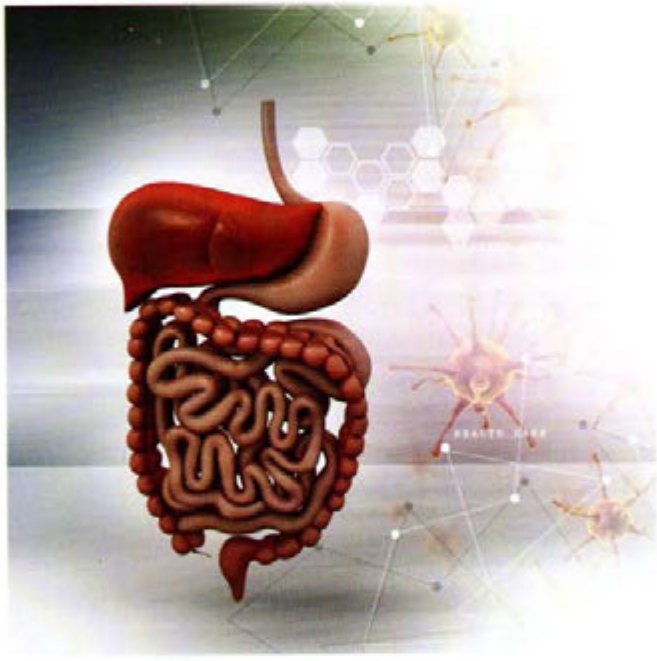
Incidental detection of Bombay blood group phenotype in a patient undergoing Whipple's pancreatoduodenectomy for chronic calcific pancreatitis with pancreatic cancer


Author: Dr Supriyo Ghatak
MS (PGI, Chandigarh), MCh. GI Surgery (AIIMS, Delhi), Fellowship in HPB & Liver Transplantation (King's College, London), Consultant HPB & GI Surgeon, The Calcutta Medical Research Institute
Dr Sumit Gulati
MBBS, MS, MRCS, Dip. in Lap Surgery (France), Fellowship in Liver Transplantation, Consultant Gastrointestinal Onco Surgeon, Laparoscopic Surgeon, The Calcutta Medical Research Institute
Dr Sudheer Mohammed
Department of Surgical Gastroenterology, The Calcutta Medical Research Institute
Dr Prasun Bhattacharya
Department of Transfusion Medicine, BM Birla Heart Research Centre

Bombay blood group is a rare blood group found in 1 in 10,000 individuals in India and 1:1000000 individuals in Europe.[1] Individuals with this blood group lack H antigen which is present in O, A, B and AB blood groups. This blood group is sometimes misdiagnosed as O group and results in complications after mismatched blood transfusion.[2] We present a patient with Bombay blood group who underwent Whipple's pancreatoduodenectomy for chronic calcific pancreatitis with suspicious head mass.

A 60-year-old lady presented to us with severe epigastric pain abdomen radiating to the back for 6 months. She was having oily stool suggestive of steatorrhoea. She lost 8 kgs over these 6 months. Her appetite was normal and she was not jaundiced. She was hypertensive and diabetic for 20 years. Physical examination was unremarkable. She was evaluated with Contrast-enhanced CT scan, which showed a mass in the head and uncinate process of the pancreas with dilated main pancreatic duct (21mm) with calcifications. Her serum CA 19-9 was more than 700 units. Her PET CT showed metabolically active disease involving the head and uncinate process of the pancreas. Her blood group reported in the past record was O Rh D positive. She was taken up for Whipple's pancreatoduodenectomy after reserving two units O Rh D positive of packed red blood cells.

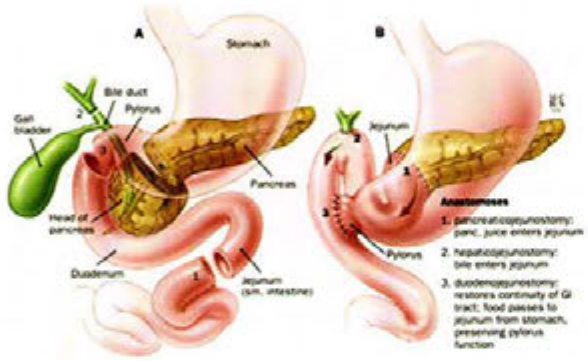
The blood bank on analysing the blood sample of the patient determined her blood group to be Bombay phenotype. They informed the surgical team immediately during the ongoing surgery. The family



members in waiting were requested to go to the blood bank for blood group and donor screening. Fortunately, two of her family members were found to be having same blood group and eligible for blood donation. The surgery was performed with utmost consideration of stringent haemostasis, so no blood transfusion was required during the surgery or in the postoperative period. She was discharged on day 6 without any complications. Her biopsy was well-differentiated adenocarcinoma of the pancreas in the background of chronic calcific pancreatitis.

The antigens of ABO group (A, B, and H) consist of complex carbohydrate molecules. The expression of A and B antigens is determined by the presence of H antigen on red blood cells. H antigen is synthesised by H gene (FUT1) which is located on chromosome 19 and give rise to glycosyltransferase that adds L-fucose to a precursor substance to produce H antigen on red cells.

H antigen is an essential substance to A transferase or B transferase which is encoded by the ABO genes located on chromosome 9. [3] A and B transferases convert H antigen into either A or B antigens.



In group O individuals, A and B transferases are absent or inactive.

Therefore, H substance persists unchanged as group O. Individuals with Bombay blood group phenotype fail to express H transferase. They cannot synthesize A or B antigens, and ABH antigens are absent from their red cells, regardless of their ABO blood group gene.

An individual with the Bombay blood group may be misdiagnosed as a common O blood group a majority of the laboratories performing blood group testing without using pooled O cells or anti-H lectins. This sort of practice of performing blood group test now needs further evaluation. [4]Also because of the presence of anti-H in their plasma, if they receive O red cells except for the Bombay blood group, they may develop an acute haemolytic transfusion reaction.

Though Bombay blood group is rare, it is found in India in small amounts. In O blood group patient's, blood group testing with pooled O cells or anti-H lectins should be performed to prevent any mishap due to mismatched blood transfusion.

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Author for correspondence:

Supriyo Ghatak, MBBS, MS, MCh (Corresponding author) Consultant, Department of Surgical Gastroenterology, The Calcutta Medical Research Institute,

7/2 Diamond Harbour Road, Kolkata 700027, India drsupriyo@yahoo.co.in
phone: +919874138687, Fax: +91 33 2456 7880

Is your heart pumping adequate blood?

Dr Siddharth Sarangi
Consultant Cardiothoracic Surgeon
MBBS, MCh

Heart failure (HF) is a major, worldwide public health issue, with a prevalence of over 23 million worldwide; the figure is consistently on the rise. The American Heart Association says that one in five people have a lifetime risk of developing heart failure. Not only is the issue a serious health concern, it also poses a serious burden on healthcare costs across the world. Doctors and specialists agree that awareness and timely intervention are the best ways to relieving the burden of heart failure. The burden of cardiovascular disease is increasing at an alarming rate in our country. Patients with coronary artery disease in the Indian subcontinent are at least ten to fifteen years younger compared to their western counterparts.

Heart failure is a condition in which the heart muscle weakens and the heart enlarges, ultimately rendering the heart incapable of pumping enough blood to the rest of the body. The power of the heart muscle to pump blood decreases over a period of time. It usually takes years for severe heart failure to develop, however, early signs can be detected if regular and consistent check-up routines are followed. Once a person knows they are at risk, they should make immediate lifestyle changes to prevent heart failure in later years.

According to popular belief, heart failure does not imply that the heart has stopped beating. It simply means the heart is not pumping adequate amounts of blood and the body are getting insufficient oxygen putting the rest of the organs in the body at risk.

Patients manifest symptoms of the heart attack in various ways. Most common amongst them is shortness of breath either while engaging in physical activity or in some cases even at rest. Palpitation or increase in heart rate is another symptom. Fluid retention in the limbs is also a common sign that the person is suffering from heart failure. Other possible symptoms include decreased appetite, nausea and vomiting, confusion and impairment of thinking. People with heart failure are extremely susceptible to common illnesses like cold, flu and prone to catching other diseases easily, sometimes leading to their death.

For a population that does not exercise regularly, follows unhealthy dietary habits and lives with increased risk of diabetes is naturally threatened by Cardiovascular diseases.

Need of the hour is a streamlined system in which heart failure can be looked at in a focused and comprehensive manner. The disease can be managed with greater success through knowledge and expertise combined with new technologies. Heart failure patients need constant monitoring of their symptoms. They need advice on surgical or non-surgical procedures to manage the disease. They require regular instructions on correct nutritional diet and cardiac rehabilitation for heart failure patients.

Lifestyle modification is a key piece of the puzzle to manage and control the burden of Cardiovascular diseases leading to heart failure.

Medical Milestones

BMB performs complicated surgery to repair tear in aorta

Dr Manoj Kumar Daga
Consultant Cardiothoracic Surgeon
MBBS, MS, MCh, Fellowship in
Cardiac Thoracic Surgery, Auckland, New Zealand

A 42-year-old patient came to Dr Manoj Daga, Cardiothoracic Surgeon at BM Birla Heart Research Centre, with a tear in the inner layer of the aorta. Medically this is termed as an aortic dissection, but for a non-professional, it meant the patient was bleeding into the false layer of the blood vessel with a risk of rupturing at any minute.

The aorta is the main blood vessel supplying blood to the rest of the body and a rupture would mean an immediate death. The tear for this patient extended up to the head branches and the branches supplying blood to the lower limbs. When the patient had arrived at BM Birla Heart Research Centre the valve was leaking and the prognosis did not seem very good.

Cases of aortic dissection are very rare. It is relatively more common in colder areas of the world where the blood vessels are subject to sudden fluctuations due to irregular pressure. In the subcontinent cases of aortic dissection are comparatively rare.

Dr Daga instantly recognised the acute emergency and took the patient to the operation table immediately. Ideally, the patient should have been operated soon after diagnosis, but the patient reached BM Birla after seven to ten days of diagnosis at another hospital.

After 5-6 hours of surgery, the aortic valve was changed with a mechanical valve and the entire dissected pipe was also replaced. Head blood vessels had to be implanted to restore normal blood supply to the head vessels. A graft replacement was also done of the entire ascending aorta with a synthetic tube, the aortic arch and the upper part of the descending thoracic aorta. The patient took some time to recover from the post-operative stage after this intense procedure but now his vitals are normal. He has resumed his regular activities.

Dr Daga said, while an aortic dissection is always an emergency the surgical complications can be reduced if the patient is brought to the hospital within the 1st two hours of the aortic dissection. According to research, 90% of patients die within 2-3 days.

The most visible sign of an aortic dissection is acute and excruciating pain arising from the back and coming to the chest or going towards the back. The pain is similar to a heart attack and in both cases, the patient should be rushed to a cardiac care centre without any delay. Cases of aortic dissection are also noticed in patients with uncontrolled blood pressure.

Take care of your heart

Dr Anjan Siotia
Consultant Interventional Cardiologist
MBBS (Ind), MRCP (UK), MD (UK)
CCDS (USA), CCT (Cardiology, UK)

Just handling your blood sugar levels is not enough when managing diabetes. According to research, India houses 65.1 million diabetics, second only to China. Diabetic complications go beyond blood sugar and therefore risk factors culminating from diabetes increased by manifold. The good news is that with correct treatment and a healthy and responsible lifestyle these complications can be prevented or delayed. Moreover, it is far less of a burden on the wallet to manage diabetes early than to treat its complications like cardiovascular diseases.

If you have diabetes, your risk of cardiovascular disease rises for some number of reasons. Hypertension, abnormal blood lipids and obesity, all risk factors in their own right for cardiovascular disease, occur more frequently in people with diabetes. Uncontrolled diabetes causes damage to your body's blood vessels making them more prone to atherosclerosis and hypertension. People with diabetes develop atherosclerosis at a younger age and more severely than people without diabetes.

Research has pinned diabetes as the strongest risk factor for heart disease. About 65 percent of people with diabetes actually die of cardiovascular diseases and a person with diabetes has twice the chance of developing heart disease as someone without diabetes. A person with diabetes who has had one heart attack has a much greater risk of having a second one. A middle-aged person who has diabetes has the same chance of having a heart attack as someone who is not diabetic but has already had a heart attack. People with diabetes develop cardiovascular disease at a much earlier age than others. Not only that, people with diabetes who have heart attacks are more likely to die as a result of it compared to non-diabetics who have a heart attack.

By controlling our blood sugar levels very stringently, we can reduce the risk of some complications significantly but this has minimal impact on the cardiovascular or macrovascular risk. This is not to say that diabetics don t need to reduce their blood sugar levels to reduce their risk of having a heart attack but that benefit is not huge. In fact, diabetics can reduce their cardiovascular risk more by some changes in their lifestyle like giving up on their smoking habit, controlling their blood pressure and keeping their cholesterol within the normal range.

Target and achieve

Diabetes needs to be managed with an all-round approach and by empowering the patient with information so that he/she can make informed lifestyle choices and adopt responsible health practices.

The statistics speak for themselves in the all round management of diabetes - If you control your blood glucose levels, you reduce your risk of cardiovascular disease from 33% to 50%. If you control your blood lipids, you can reduce cardiovascular disease complications from 20% to 50%. Losing weight and maintaining a healthy diet will improve your diabetes status. If you have impaired glucose tolerance and lose weight, you can prevent the onset of diabetes. Giving up smoking will reduce your cardiovascular disease risk.

At BM Birla Heart Research Centre we recommend a targeted approach to managing diabetes to reduce the risk of cardiovascular diseases. Set healthy targets in consultation with your diabetologist and work together to achieve these targets.

Know and control your ABCs - Even if you have heart disease or have already had a heart attack or a stroke, every step you take to keep your ABCs (A1C, Blood pressure, and Cholesterol) in your target range will help lower your risk of future heart disease or a stroke.

Get your blood glucose levels, blood pressure and blood cholesterol checked at least once a year and aim to keep to the target agreed with your health care team.

Successful Complex Aortic Surgery

Dr Budhaditya Ranabir Chakraborty
Senior Consultant CTVS , RBH, Jaipur
MS, MCh (AIIMS), FACS

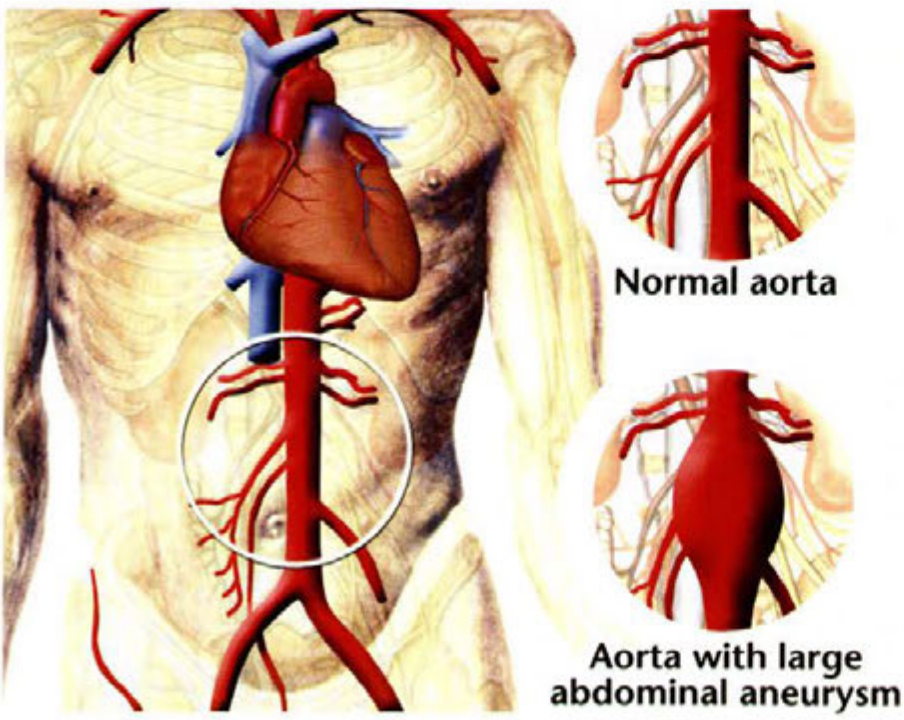
A 65-year-old farmer from Sawar in the Ajmer district arrived at Rukmini Birla Hospital (RBH) in Jaipur with severe palpitation, breathlessness on exertion and easy fatigue. He had spent a year running from pillar to post trying to figure out his condition, his requirement was surgery and a fully equipped centre where there were medical experts who could handle his case.

Most complex aortic pathologies are referred to doctors in other cities. But when the 65-year-old patient came to RBH in Jaipur he found the answer to his problems. Dr Budhaditya Chakraborty, Senior Consultant and Cardiac Surgeon at RBH diagnosed three complications in his aorta. Dilated aortic root, dilated ascending aortic arch and severe aortic regurgitation were detected from tests conducted on him. The aorta at its highest dilation was at 6.8cm. Dilation above 6cm has a risk of rupturing. The patient needed immediate surgery. RBH is one of the only centres in Jaipur equipped with complicated aortic pathologies.

In an operation procedure lasted for more than 7 hours, Dr Chakraborty and his team of excellent medical experts meticulously dealt with each issue. The Patient was placed under complete circulatory arrest. The patient's body temperature was dropped to an extreme low and the blood was carefully drained out of his body. The circulation to the brain was simultaneously maintained.

The team replaced the aortic root, ascending aorta and half of the aortic arch. Keeping the age of the patient in mind a pre -formed tissue aortic root was implanted in the patient which would optimise his medical therapy in future by avoiding anticoagulation.

The patient underwent a steady recovery and was discharged within a week of surgery. Thanks to the technically astute cardiac anaesthetic team, Physical therapists and dedicated ICU nursing personnel the patient had a holistic care experience. Complete with expert surgical care and intervention cardiology and radiology for all catheter-based aortic interventions, RBH is now the one-stop destination for all complex cases pertaining to the aorta and all other cardiovascular pathologies.



Normal aorta

Aorta with large abdominal aneurysm

Events at CMRI

The CMRI hospital has not only excelled in the field of corrective treatment and patient care but the hospital has embarked on many outstanding achievements that have helped in making its position more sustainable. Growth continues to empower all who are associated academically or professionally with the hospital. In this academic year, the hospital trained DNB graduates to achieve greater proficiency in their respective fields. The Academic Department of CMRI has several fresh affiliations for different specialities like:


The hospital conducts Grand rounds every month where the total numbers of cases are presented and surgeries that have been done remarkably well are highlighted for their unique clinical presentation.

- **Pre-conference symposium for Ethicon 2016**
- **Nephrology CME and workshop in the September 2016**
- **Neurospine conference in September 2016**
- **The hospital has become ACLS and BLS centre**
- **Felicitation of DNB graduates from CMRI**

The hospital has gone through a series of internal renovations in administrative activities. Every floor has been deployed with a medical admin doctor with assigned job responsibilities, effective steps on ward management and documentation and hygiene, the introduction of new Locum Forms, helping the government in various health programs and organising HIV counselling program in collaboration with Sasthya Bhavan. The hospital also collaborated with WHO on an awareness programme on poliomyelitis in the CMRI auditorium.


Events at RBH

Ambulance Mock Drill in Jaipur

RBH in association with The Times of India organised mock drills for Ambulance Services to observe their abilities in traffic management. The ambulance sped from Tonk Road, JLN Marg and the Vishali Nagar areas piercing through the lanes and bylanes as it rushed to the hospital. The drill also helped to educate people on why they should give way to a speeding ambulance as every second count when it comes to saving a life. Some people extended their help by clearing roads and making the place for the ambulance to pass. Such acts by citizens were awarded titles of 'Life Savers'; some were even given prizes for their responsible gestures.


Ambulance Mock Drill

ALL FOR AWARENESS


Ambulance Mock Drill

A WAKE-UP CALL

BTL activity at Nohar

RBH organised a BTL activity at Nohar where more than 500 patients were benefited from a direct consultation with doctors.

Specialities of CMRI

- Anaesthesiology
- Audiology & Speech Therapy
- Critical Care
- Dental & Maxillofacial
- Dermatology
- Endocrinology & Diabetic Clinic
- ENT
- GI & HPB Surgery
- Gastroenterology
- General Medicine
- General Surgery
- Haematology
- Intervention Radiology
- Nephrology & Kidney Transplant Unit
- Neuro Surgery
- Neurology
- Obstetrics & Gynaecology
- Ophthalmology
- Bone & Joint
- Paediatric Audiology
- Paediatric Cardiology
- Paediatric Endocrinology
- Paediatric Medicine
- Paediatric Neurology
- Paediatric Nephrology
- Paediatric Surgery
- Physiotherapy
- Psychiatry
- Pulmonary Medicine
- Reconstructive & Plastic Surgery
- Sports Medicine
- Tropical Medicine
- Urology
- Vascular & Thoracic Surgery



Specialities of BMB

Intervention Cardiology

- 3 state-of-the-art Cath Labs
- Angiography
- Radial Angiography
- Angioplasty
- Primary Angioplasty
- Pacemaker & Device Implantation
- Fractional Flow Reserve
- EP Study
- Upgraded EP-RF Ablation
- Adult & Paediatric Cardiology

Adult & Paediatric Cardiac Surgery

- 4 state-of-the-art Operation Theatres with laminar flow system
- Standard operating equipment for adults & children
- Cardiac assist device i.e. IABP, LVAD, Centrifugal heart pump
- Transesophageal echo device
- State-of-the-art monitors & ventilators

Critical Care Units

- 1:1 nursing
- 24x7 Chest Pain Centre
- State-of-the-art 53 bedded CCU with advanced technology & equipment at each bedside
- 26 bedded ITU
- 9 bedded HDU

Non-Invasive Diagnostics

- Echocardiography
- Holter
- Treadmill Stress Test
- Electrocardiogram (ECG)
- X-ray
- PFT
- USG

Clinics / Departments

- Advanced Heart Failure Clinic
- Cardiac Health Check-up
- Cardiac-Diabetes Clinic
- Nuclear Medicine with Gamma Camera
- Cardio Pulmonary Rehabilitation & Lifestyle Guidance Clinic
- Pathology & Microbiology



Specialities of RBH

Services

- Ambulance Service
- Anaesthesiology
- Cardiac Pulmonary Rehab & Lifestyle Guidance Clinic
- Cathlab
- Critical Care
- Day Care
- Dietetics
- Emergency (24x7) and Trauma Care
- Emergency Medicine
- IPD
- Lab Diagnostic
- OPD
- Pharmacy
- Preventive Health Check
- Radiology

Specialities

- Bone & Joint
- Cardiothoracic and Vascular Surgery
- Dental
- Endocrinology
- Gastroenterology
- General and Minimally Invasive Surgery
- Internal Medicine and Infectious Diseases
- Invasive & Non-Invasive Cardiology
- Obstetrics & Gynaecology
- Osteopathy
- Paediatrics & Neonatology
- Respiratory Medicine



Editorial Team: Dr D Sarma • Dr Sankar Sengupta • Dr Anirban Mukherjee • Piyashi Roy Choudhury • Urmii Kar

CMRI

The Calcutta Medical Research Institute

7/2 Diamond Harbour Road, Kolkata 700027

BMB

B M Birla Heart Research Centre

1/1 National Library Avenue, Kolkata 700027

RBH

Rukmani Birla Hospital

Gopalpura Bypass Road, Jaipur 302018