LILAVATI HOSPITAL MEDICAL TIMES

JANUARY 2019

Top ranking in Mumbai, Western Region and Nationally

HEALTH CARE SURVEY
BEST HOSPITALS
NATIONAL

All India Critical Care Hospital Ranking Survey 2019

Lilavati Hospital and Research Centre

More than Healthcare, Human Care

NABH Accredited Healthcare Provider

Contents

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Editorial

At the onset I would like to wish all our readers a very Happy, Prosperous and Healthy New Year.

With your participation and support it gives me immense pleasure to present yet another informative issue of Lilavati Hospital Medical Times (LHMT).

We all might agree that the level Indian healthcare system varies from states and demographic segments within the population. Though this challenge is unique and complex it yet offers opportunity to all the healthcare professionals & institutes to largely contribute for better healthcare services across the country.

This edition of LHMT offers review article on Cardiovascular and Thoracic Surgery and informative case reports presented by our experts in the field o Chest Medicine,MRI,Paediatrics and Paediatric Surgery. We have also shared the recent developments in our hospital, achievements of our doctors, various accolades and awards received by the hospital. Besides this we have our straight from the heart section that illustrates the appreciations received for the relentless efforts put in by our staff. We have also enclosed details of recent CMEs that are regularly conducted to spread information to the medicos who want to keep pace with the cutting edge technology and the latest medical techniques practiced.

I would be glad to receive any feedback from you which will help me in making LHMT event better. We all at Lilavati Hospital and Research Centre always strive to improve in all areas of life and I look forward for your involvement to a greater extend to broaden our reach to larger section of people and taking LHMT to the next best possible level.

Dr. Sanjeev Mehta
Chief Editor

We proudly announce the official launch of

Lilavati Hospital Stamp

by the Indian Postal Department

Overview: Lilavati Hospital & Research Centre

Late Shri Kirtilal Mehta

Late Smt. Lilavati K. Mehta

Lilavati Kirtilal Mehta Medical Trust

Lilavati Hospital and Research Centre is run and managed by Public Charitable Trust - Lilavati Kirtilal Mehta Medical Trust which was formed in 1978. The Trust was started by late Shri Kirtilal Manilal Mehta. The Trust has engaged in innumerable charitable endeavors across India.

The Lilavati Kirtilal Mehta Medical Trust is being managed and administered by Board of Trustees:

Shri Prabodh K. Mehta	Shri Nanik Rupani
Shri Kishor K. Mehta	Shri K. K. Modi
Shri Rashmi K. Mehta	Shri Niket V. Mehta
Smt. Rekha H. Sheth	Shri Chetan P. Mehta
Smt. Sushila V. Mehta	Shri Bhavin R. Mehta
Smt. Charu K. Mehta	

Principal Advisor to the Board of Trustees and
Lilavati Hospital & Research Centre
Shri S. Lakshminarayanan, IAS (Rtd.)

Lilavati Hospital And Research Centre

Late Shri Vijay Mehta wished to fulfill his parents desire to build a world-class hospital where everyone in need for relief from disease and suffering come in with a certainty to receive the best possible medical care. His passion, attention to details and perseverance resulted in iconic healthcare landmark called **Lilavati Hospital**.

Lilavati Hospital & Research Centre is a premier multispecialty tertiary care hospital located in the heart of Mumbai, close to the domestic and the international airport. It encompasses modern healthcare facilities and state of art technology dedicatedly supported by committed staff.

Lilavati Hospital has focused its operation on providing quality care with a human touch; which truly reflects the essence of its motto, “More than Healthcare, Human Care”. Being a centre of medical excellence where technology meets international norms and standard, the hospital has got what it takes to be a pioneering quality healthcare institute that is also one of the most sought after and patient friendly hospital.

Mission: *To provide affordable healthcare of international standard with human care*
Motto: *More than Healthcare, Human Care*

Highlights

- 323 bedded hospital including 77 intensive care beds
- 12 state-of-the-art well equipped operation theatres
- Full-fledged Dental & Dermo cosmetology clinic
- State of art PET – SPECT CT department
- Lilavati Hospital is recently equipped with Coronary GRAFT Patency Flowmeter which is first of its kind in India. This imaging system is used in Cardiac surgery to assess GRAFT flow / perfusion in coronary bypass surgery.
- The hospital has added Intraoperative Nerve Monitoring system which enables surgeons to identify, confirm and monitor motor nerve function of the patients which helps to reduce the risk of nerve damage during various operative surgeries.
- The hospital has upgraded its ENT department by adding a top-of-the line surgical operating microscope to carry out various microsurgeries under high magnification. The microscope electronics allows the surgeon to electronically control object focusing, magnification,illumination, surgical recording, etc.
- All days round the clock OPD Pathology and Radiology investigations without any Emergency charges.
- ICU Emergency charges after 8pm are kept at par with the day time and additional charges are withdrawn.
- More than 300 consultants and manpower of nearly 1,800.
- Hospital attends to around 400 In-patients and Out-patients daily.
- Modern Cathlabs having specialized SICU & ICCU with highly trained cardiac care medical staff
- Lilavati Kirtilal Mehta Medical trust is an approved research organization by Ministry of Science & Technology having all modern facilities necessary for conducting research

Lilavati Kirtilal Mehta Medical Trust Research Centre

The Lilavati Kirtilal Mehta Medical Trust Research Centre is a Scientific and Industrial Research Organization approved by Ministry of Science and Technology (Govt. of India). The Research Centre under guidelines of Dept. of Science & Technology works in close collaboration in evaluating and developing technologies for better healthcare to the sick people. The research centre has undertaken multidisciplinary researches in the fields of Cardiology, Radiology, Cerebrovascular Diseases (Stroke), Ophthalmology, Chest Medicine, Nuclear Medicine, Pathology, Oncology, Orthopedics etc., to cite a few. One of the important aim of the research centre is to establish community based epidemiological researches in cerebrovascular disease in stroke. As a policy, Drug and Device Trials are not undertaken at the Research Centre.

Lilavati Hospital Today

Lilavati Hospital is known for setting the trends for others to follow. Following few developments are testimony of this.

Recently Introduced Clinics

LIVER TRANSPLANT CLINIC

We have eminent Liver Transplant surgeon Dr. Naimish Mehta along with his team on our panel to deliver their expertise for Liver Transplantation. He has been awarded Diploma in Liver Transplantation by the European Board of Surgery and Fellowships from academic institute.

He gained extensive training in Liver transplantation from various centres of excellence in UK and USA and is recognized as an Expert in the field of Hepato-Biliary Surgery and Liver Transplantation worldwide. He is the only Indian Transplant surgeon serving as a faculty in Certified Course in Liver Transplantation surgery conducted by European Society of Organ Transplantation.

His credits include performing successful Liver Transplantation in smallest weighing child of 4.5 kg, performing the first living donor intestinal transplantation in India, Dual Lobe Liver transplantation where two donors donate liver to a single individual, Liver Transplantation in Acute Liver failure in pregnant women and many such cases.

SERVICES OFFERED

- Evaluation of Liver Disease
- Ascitic Tapping, TIPSS procedure
- Living / Cadaver Donor Liver Transplantation
- Pediatric (Children) Liver Transplantation
- Liver Transplantation for Acute Liver Failure / Fulminant Hepatic Failure
- Liver Transplantation for Liver Cancer
- ABOi – Blood group incompatibility Liver Transplantation
- Combined Liver & Kidney Transplantation

For appointments & details contact

Coordinator Liver Transplant Clinic:

Dr. P. V. Battalwar

Call: +91 9930359546 / 022-26568981 / 26568000

Email: drpvbattalwar@lilavatihospital.com

For the solution of all the above problems, visit our

Obesity and Bariatric Surgery Clinic

Highlights of our clinic

- Surgery performed by team having experience of over 2 decades and has performed more than 5000 Bariatric Surgeries
- Modular Operation Theatres
- Dedicated Surgical Intensive Care (SICU)
- State-of-the-Art Diagnostics and Therapeutic Facilities
- Backed by Experienced and Well Trained Team

*Gastroenterology *Critical Care* Dietician
*Anesthesiology *Technicians *Nurses

For Appointment of

Dr. Shashank Shah

Consultant General Laparoscopic & Bariatric Surgeon

Contact: 9766316734 / 9822026734

HYPERTENSION CLINIC

Objectives

- To standardize hypertension management
- Avoid misdiagnosis
- Avoid under and over treatment of hypertension
- Scientifically customize hypertension management

We Standardise
Hypertension Care with Global Guidelines

HYPERTENSION CLINIC

Remember, treating high BP early saves life

Lilavati Hospital

introduces

HEART Failure Clinic

Offering Customized Patient Care

For all patients with **Heart Failure**
with low or normal ejection fraction

For details contact:
022-26568354/8355

Heart Failure Clinic

Key Features

- Specialized biochemistry tests to ascertain prognosis, therapeutic modalities & long term implication on patient with heart failure.
- Well-equipped non-invasive Cardiology department.
- Team of dedicated well-qualified Cardiologists backed by Heart Failure co-ordinator.
- Customized patient care by trained heart failure rehabilitation team.
- Dedicated Dietician for standardized dietary regimen.
- Advance Electrophysiology, Endocrinology & Sleep lab with specialized consultants.

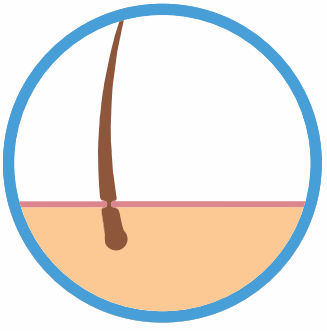
Foot and Ankle

Key Hole &
Minimally Invasive Surgery,
Fracture Fixation,
Footwear, Toe & Foot Deformity Correction

Varicose Vein

Modern facilities
available under
one roof

Hair Loss



Advanced Hair Solutions at Affordable Rates Under One Roof
Safe and Evidence Based Approach
Natural Looking Results

For Appointments Contact OPD Department:

+91 022-26568050/8051

Latest Additions

Automatic CPR Device

We have taken a step to improve the CPR quality further with the installation of portable, stand – alone mechanical multidirectional chest compression device which shall deliver chest compressions automatically at a consistent rate and dept.

Vein Illumination Device

We have procured non-contact vein illumination device which aids in identifying patent veins for venipuncture, can be used to find valves and bifurcation, it enhances visibility of small veins, works on broad range of patients including neonate, dark skinned, obese patients.

ANKLE BRACHIAL INDEX EQUIPMENT

ARE YOU GETTING PAIN ON WALKING? "NOT ALL PAIN ARE NEUROMUSCULAR"

GET YOUR CIRCULATION CHECKED @ Rs.500/- only

Walk-in to perform this test between 9 am to 4 pm

For details contact OPD:

022-26568050/51

BODY COMPOSITION ANALYZER

APPEARANCES CAN BE DECEIVING

Time to find out what you are really made of ?
Get your

BODY COMPOSITION ANALYSIS

in less than 120 secs.

@ Rs.500/- only

(* including one free consultation with Bariatric Surgery Team)

KNOW ABOUT

- **Body fat percentage & body fat mass**
- Daily calorie intake
- **Metabolic age**
- Muscle mass
- **Bone mass**
- Basal metabolic rate (BMR)
- **Abdominal fat percentage**
- Total body water
- **Muscle quality**
- Body mass index (BMI)
- **Physique rating**
- Segmental muscle mass & fat percentage

Walkin to perform this test on 7th floor Physiotherapy Dept. between 10 am to 5 pm
For details contact: 022 2675 1536

Lilavati Hospital is proud to announce the installation of the state-of-the-art

"Philips Azurion 7F20" in its CATH Lab.

This is the first of its kind high end configuration system installed in India.

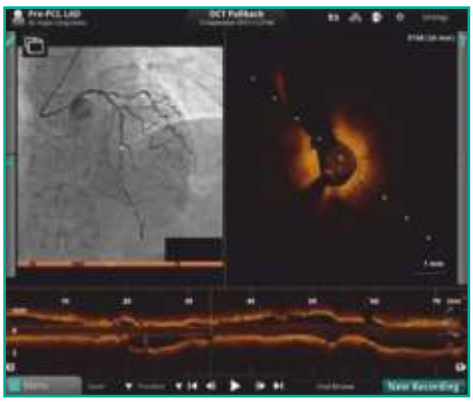
Key Highlights:

- Clarity IQ Technology
- High Quality 2K x 2K imaging chain
- Sophisticated interventional tools
  - Stent Boost Live
  - Dynamic Coronary Road Map
  - 3D Road Map
  - 3D Rotational Angiography
  - Xper CT Dual
  - 2D Perfusion
  - Integration with Volcano IVUS System
  - Vaso CT

The new system enables excellent imaging for Coronary, Cerebro & Peripheral Vascular Diseases.

OCT:

The department of Invasive cardiology has been upgraded with the addition of a High-Definition Optis Mobile OCT (Optical Coherence Tomography) system from St Jude/Abbott Labs. It has the latest configuration which gives better 3-Dimensional perspective of the coronary Artery before and after Stent deployment. The equipment is used for intravascular imaging to help Physicians make improved stenting decisions based on high-resolution and three dimensional OCT views of the coronary anatomy, while simultaneously mapping their exact location via the angiogram image. The equipment also integrates a Wireless FFR (Fractional Flow Reserve) measurement technology which offers Physicians detailed coronary hemodynamic (circulatory) information during PCI (Percutaneous Coronary Intervention) procedures. Both our CathLabs have also been upgraded to accommodate this technology for registration & display.



Corporate and Community Outreach Programs

Medical camp at Dadar on 5th & 6th Dec in association with ONGC

Blood Donation Camp at Sysmex

Health talk on "Recent Updates on Thyroid" by Dr. S. M. Bandukwala, Consultant – Internal Medicine

Basic Life Support Training at Verizon India

Health Talk on “Ways to prevent Hypertension” by Dr. Snehal Kothari, Consultant - Cardiology

Educational Activities

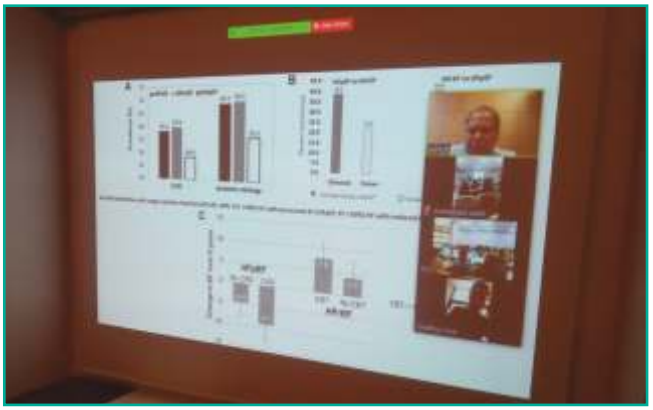
Our doctors share their intellectual capital and expertise with others through CMEs using means like workshops, seminars, conferences, live telecast of procedures and surgeries, which they are performing. Our hospital has been accredited by Maharashtra Medical Council for conducting CMEs.

No.	Topic	Department
1	Changing Trends In Gastrointestinal Surgery	GI Surgery
2	Integrating Pediatrics in Primary Care	Pediatrics
3	Role of Nutrition in Non Alcoholic Fatty Liver Disease and Liver Transplant	Dietetics
4	Webinar for Yemen Consulate on Recent Guidelines in Heart Failure Treatment	Cardiology
5	Iatrogenic Toxicity in Lungs: Non-pharmacological	Chest Medicine
6	Current Concepts in Infectious Diseases	Infectious Diseases
7	Iatrogenic Toxicity in Lungs: Pharmacological	Chest Medicine
8	DNB Pediatrics OSCE CME - 2018	Pediatrics

▲ Current Concepts in Infectious Diseases

▲ Integrating Pediatrics in Primary Care

▲ Role of Nutrition in Non Alcoholic Fatty Liver Disease and Liver Transplant



▲ Recent Guidelines in Heart Failure Treatment

Few Honourable Mentions

Our Physiotherapy Department is now Mckenzie Certified Clinic

- We are proud to announce that Lilavati Hospital Physiotherapy Department is now a "Mckenzie Certified Clinic" and now is a part of the International network of certified clinics. A Mckenzie Certified Clinic (by Mckenzie Institute International, New Zealand) can only be so certifed when it has the services of a McKenzie Diploma Holder. Heena Garude who has completed the McKenzie Diploma successfully has been instrumental in getting this status granted to our clinic. The Mckenzie method of Mechanical Diagnosis and Therapy is a comprehensive, evidence based classification system for the assessment and management of patients with musculoskeletal problems. The evaluation, diagnosis, treatment, progress and prophylatic strategies for spine and extremity problems are aimed at patient education and empowerment. It is time and cost effective and does not rely on expensive machines, tests or procedures.
- Second prize for poster presentation was received by Dr. Nikhil Rathi, Dr. L. H. Suratkal, Dr. Abhay Bhave and Dr. Wasi Sheikh in Indian Society of Nephrology West zone conference held at Lonavala from 28-30 Sept, 2018. The topic was Young Adult with dRTA and haemolytic anemia due to genetic mutation.
- Lilavati Hospital encourages and regularly provides learning platform to International Clinical Observers / Summer Trainees.

No.	Name of Observer / Summer Trainee	University	From - To
1	Ms. Farheen Dalvi	Stellenbosch University South Africa	25/10/2018 to 24/11/2018
2	Ms. Shruti Suresh	Charles University, Prague 2	16.07.2018 to 31.07.2018
3	Ms. Swetambara Bandre	Privolzski Isledovatelski Medical University	19.06.2018 to 31.07.2018
4	Ms. Merle Crasto	Privolzski Isledovatelski Medical University	20.06.2018 to 11.07.2018
5	Ms. Priyanka Bedi	Pennsylvania State University (PSU)	11.06.2018 to 07.07.2018
6	Ms. Shivani Mankar	Privolzski Isledovatelski Medical University	12.06.2018 to 02.07.2018
7	Ms. Melisa Sussman	Lake Erie College of Osteop. Med.	28.05.2018 to 05.06.2018
8	Ms. Shivani Mehta	Lake Erie College of Osteop. Med.	28.05.2018 to 05.06.2018

Ode To A Friend

Jab koi taaza garam chutkule pakaoge
Hume zaroor yaad rakhna
Jeb mein land line le gaye ho accha kiya
Mobile se bahut call drop hote hai
Kahan chitti likhoge ya taar bhejoge
Ring dete rehna Touch me rehna

By Dr. L. H. Suratkal, Consultant – Nephrology

Late Dr. Anil Sharma,Consultant – Cardiology

- Congratulations to Dr. Nandita Palshetkar, Consultant – Obstetrics & Gynaecology and IVF Clinic for being installed as the President of FOGSI 2019 on 9th Jan, 2019. The Federation of Obstetric and Gynaecological Societies of India (FOGSI) is the professional organization representing practitioners of Obstetrics and Gynaecology in India with 241 member societies and over 33,000 individual members spread over the length and breadth of the country.
- Dr. Sanjay Desai, Consultant - Orthopaedic received prestigious Dr. B. C. Roy award for his noteworthy work done in the field of Orthopaedics and for developing a subspeciality and taking it to international level.
- Dr. Shashank Shah, Consultant – Obesity and Bariatric Surgery is honoured with the American Diabetes Association's 'Vivian Fonseca Scholar' Award for his contribution in surgical treatment of Type II Diabetes

- Dr. Naimish Mehta ,Liver Transplant Surgeon was awarded the most coveted and prestigious award, "The Times Healthcare Achievers Award" for his contribution in the field of Liver Transplant.

Lung Transplantation: Indications and Results

Dr. Babar Bashir Chaudhri
BA, MB, BCHIR, MA (Cambridge), MD (London), FRCS Eng, FRCS CTH, CCT UK,
Consultant – Cardiac Thoracic and Transplant Surgeon

Indications for Lung Transplantation

Indications for lung transplantation include in general terms, obstructive, septic, restrictive and vascular pulmonary diseases8. The criteria eligibility for consideration for transplantation also are shown in table 1. In the presence of septic lung disease or pulmonary hypertension, the patient should receive a bilateral lung transplant. This removes the focus of sepsis and prevents contamination of the transplanted lung and provides the largest possible vascular bed. Lung transplant candidates with obstructive lung disease or pulmonary fibrosis may receive either a single (SLT) or a bilateral lung transplant (BLT)[1].

Table 1 : Indications for Lung Transplantation

Emphysema/ a1/Anti trypsin Deficiency	BODE Score>7 Exacerbations with acute hypercapnic respiratory failure FEV1<20% OR DLCO <20% Pulmonary Hypertension + or cor pulmonale despite O2 therapy
Pulmonary Fibrosis	DLCO<35% 10% Fall in FVC within 6 months 15% Fall in DLCO within 6 months O2 saturation <88% during 6min walk test
Cystic Fibrosis And Bronchiectasis	FEV1 <30%, rapid loss of FEV1 especially young females Severe exacerbations requiring ICU Increasing frequencies of exacerbations Recurrent or refractory pneumothorax Uncontrolled haemoptysis O2 dependent respiratory failure + hypercapnia Pulmonary Hypertension
Pulmonary Hypertension	Rapidly progressive disease WHO/NYHA class III/IV despite treatment/ maximal medical therapy Low or declining 6 minute walk test Failing therapy with iv prostaglandin therapy Cardiac Index < 2L/min/m2
Sarcoidosis	NYHA class III/IV despite treatment Hypoxaemia at rest Pulmonary hypertension Right atrial pressure<15 mmHg
Cystic Lung Disease	Hypoxaemia at rest, Pulmonary hypertension Severe impairment in lung function and exercise capacity

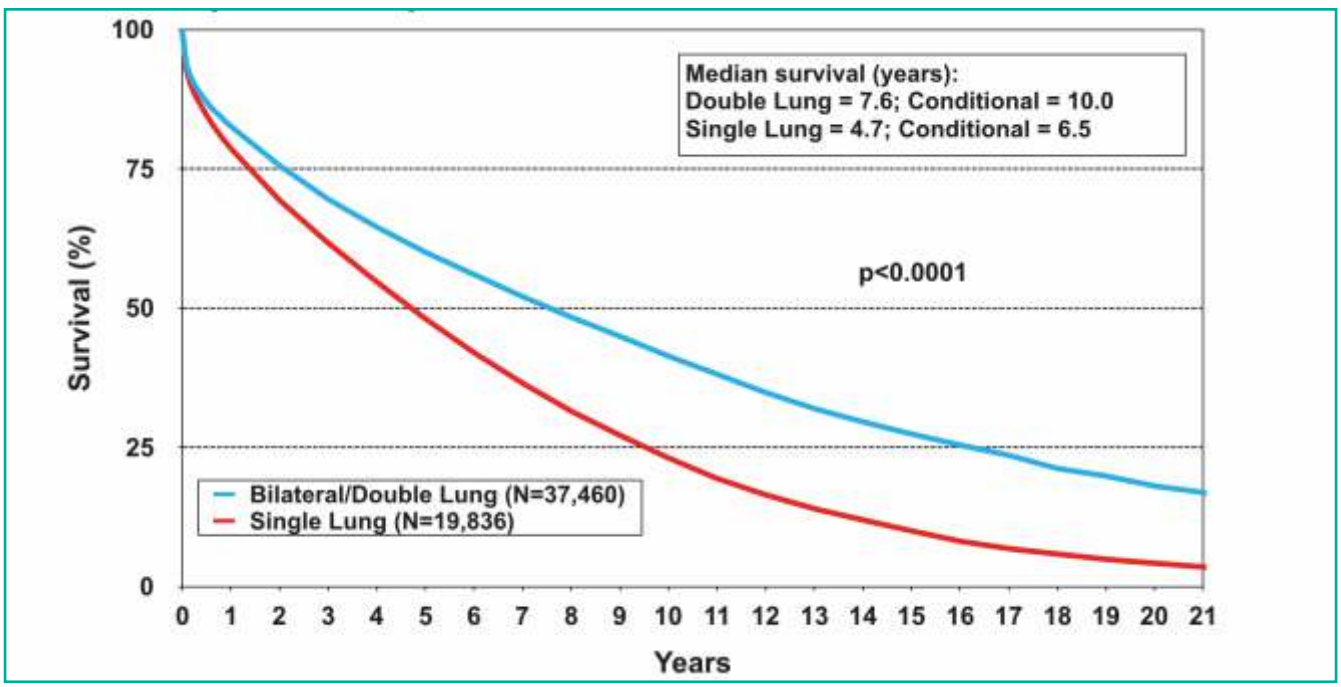
BODE: body mass index, airflow obstruction, dyspnoea and exercise capacity index; FEV1: forced expiratory volume I 1s;
DLCO: diffusing capacity of the lung for carbon monoxide; ICU: intensive care unit; WHO: World Health Organisation; NYHA: New York Heart Association class

Results

Since 1988 the ISHLT has collected data from the majority of lung transplantation centres world wide, voluntarily. In the year ending March 2016, 5445 single and double lung transplants were reported. The mortality rate was highest in the first year. For all lung transplants the half life reported was 5.3 years, excluding the first year of attrition (conditional half life) 7.5 years. The survival for BLT is 7.6 and 10 years respectively and for SLT 4.7 and 6.5 years[2]. These are unadjusted figures. Rates of survival vary for patient age, type of transplant procedure and underlying diagnosis. COPD and IPF are associated with reduced survival probably because of the advanced age of this recipient population and the increased likelihood of receiving a SLT. Best survival is seen with younger patients receiving a BLT, whereas the worst outcomes are seen with elderly patients with IPF and SLT[2].

As a group, lung transplantation provides survival benefit for patients with end stage pulmonary disease[3]. This is best seen in patients with CF or IPF, and improved survival can be shown within a few months compared to ongoing medical management for individuals eligible for transplantation. It can be concluded, therefore, that transplantation is most beneficial in the preterminal phase of these illnesses. In general patients are listed when their life expectancy falls below 2 years.

Adult Lung Transplants
Kaplan-Meier Survival by Procedure Type for Primary Transplant Recipients
(Transplants: January 1990 - June 2016)



References

1. Orens JB, Estenne M, Arcasoy S et al. International guidelines for the selection of lung transplant candidates: 2006 update--a consensus report from the Pulmonary Scientific Council of the International Society for Heart and Lung Transplantation. J Heart Lung Transplant 2006 July;25(7):745-55.
2. J Heart Lung Transplant 2018 Oct: 37(10):115-1206
3. Geertsma A, Ten Vergert EM, Bonsel GJ, de Boer WJ, van der Bij W. Does lung transplantation prolong life? A comparison of survival with and without transplantation. J Heart Lung Transplant 1998 May;17(5):511-6.

A rare case of ARDS due to infective endocarditis

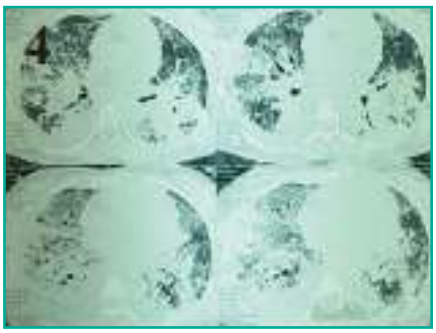
Dr. Ruby Joseph K., MBBS, DNB Resident – Chest Medicine
Dr. Anand Vardhan, MBBS, DNB Resident – Chest Medicine
Dr. Smit Modi, MBBS, DNB Resident – Chest Medicine
Dr. Sanjeev K. Mehta, MD, FCCP, FAPSR, Consultant – Chest Medicine

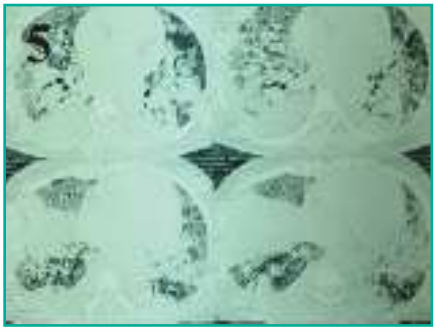
Introduction

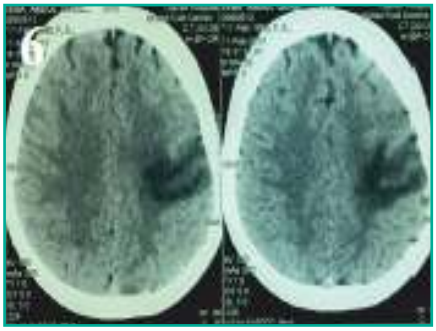
Infective Endocarditis (IE) has an estimated annual incidence of 3 to 9 cases per 100,000 people in industrialized countries. The M: F case ratio is more than 2:1. Cerebral complications are the most severe & most frequent extra cardiac complication of IE (occurring in 15 to 20% of patients) including ischemic and hemorrhagic stroke (preceding the diagnosis of infective endocarditis in 60% of patients)[1]. IE presenting as acute respiratory distress syndrome (ARDS) is extremely rare. Although coagulase negative staphylococci are recognised as frequent pathogens of prosthetic valve infection they can also cause native valve infection in a minority of IE cases. Though they are sub acute in presentation the morbidity and mortality associated is considerable.

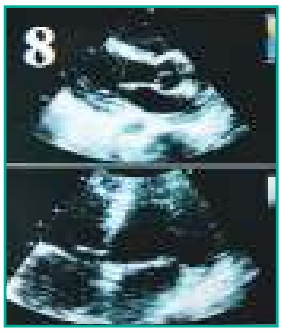
Case Report

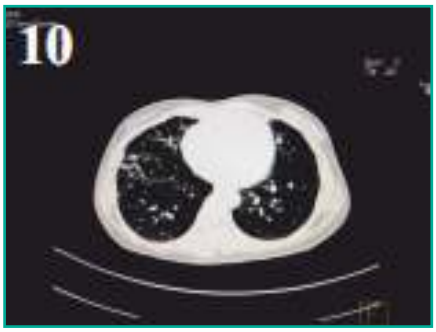
A 23 yrs old female, with no co-morbidities, admitted for bilateral mid zone consolidation, in intubated, unresponsive state on IV antibiotics and inotropic support. She had moderate ARDS with PaO2/FiO2 of 123. Echo showed LVEF of 50-60 % with myxomatous anterior leaflet of mitral valve. Blood culture grew Streptococcus spp. Despite antibiotics fever persisted. Cultures were repeated. Central line tip grew Staphylococcus hemolyticus. Transesophageal Echo revealed large vegetation on anterior scallop of mitral valve. She progressed to mild mitral regurgitation and later to mitral valve prolapse. Neurological status improved to reveal a dense right hemiplegia. MRA showed sub-acute emboli in right anterior MCA territory. Antibiotics were changed to Ceftriaxone and Vancomycin to which her fever responded. She was eventually decannulated, placed on oral anticoagulants, given physiotherapy and discharged.











1-3,9 : Serial Chest X-Rays
4-5,10 : HRCT Chest
6 : MRI Brain
7-8 : 2D Echo showing mitral valve prolapse

Discussion

- Ours was a very rare presentation of IE with many learning points.
- This is probably the first case describing ARDS as a presenting feature of IE in a normal native heart valve in a patient with no co-morbidities.
- Only 10-20% of IE present with stroke.
- Staphylococcus is second commonest cause of infective endocarditis (IE) with a male predilection. Our patient was a female so statistics can be misleading.
- Streptococcus is a common commensal/contaminant. Its presence should lead to repeat cultures to detect the true pathogenic organism.

Conclusion

The need to persistently search for cause of disease is highlighted in this case. Repeated tests would lead us to discover the vegetation and the true culprit organism. Had we dismissed it as a case of ARDS with stroke we would have probably lost her to the bacterial army sitting behind her heart valves. When lot of organs are affected it could be a single disease than various co-existent diseases.

References

1. http://www.nejm.org/doi/full/10.1056/NEJMcp1206782
2. Mann, D. L., Zipes, D. P., Libby, P., Bonow, R. O., & Braunwald, E. (2015). Braunwald's heart disease: A textbook of cardiovascular medicine(Tenth edition.). Philadelphia, PA: Elsevier/Saunders.Chapter 64:pages 1524-1526

A rare case of multifocal osteonecrosis knee in a patient on long term steriod therapy: MRI findings

Dr. Shritika Sunilkumar Sureka, DNB Resident – Radio-diagnosis
Dr. Ashlesha Udare MD, DNB, ESR Fellow

Case Report:

A 23 yrs old female known case of Myasthenia Gravis presented with complaints of bilateral knee pain since 3 months. She had past history of similar complaints. On examination both knees were swollen, erythematous and tender.

A dedicated high-resolution 3T MRI of the knee (Fig. 1) was performed for this patient. It revealed irregular geographic areas of abnormal signal intensity with a serpentine T1 hypointense rim, involving the medial femoral condyle, femoral shaft and proximal tibia. Hyperintense line is noted lying just beneath this hypointense line (double line sign). Another hyperintensity is noted along the medial femoral condyle in subchondral region, sandwiched between two hypointense lines (rim sign). Postcontrast images (Fig.2) revealed multiple nonenhancing central necrotic areas with peripheral rim enhancement involving shaft of femur and tibia suggestive of medullary infarct. Similar findings are seen in the opposite knee joint.

Above imaging findings are suggestive of multifocal osteonecrosis of knee.

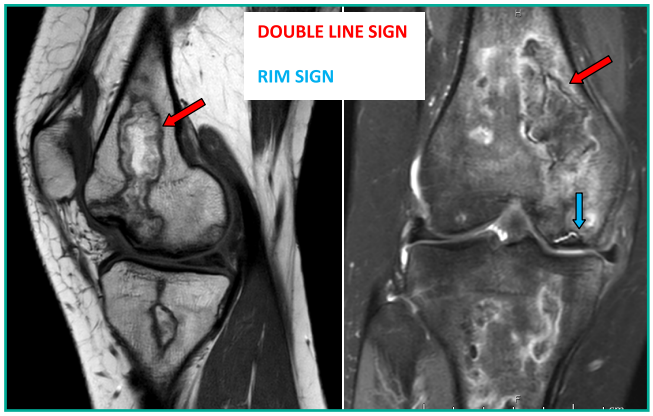


Fig.1 T1W STIR CORONAL

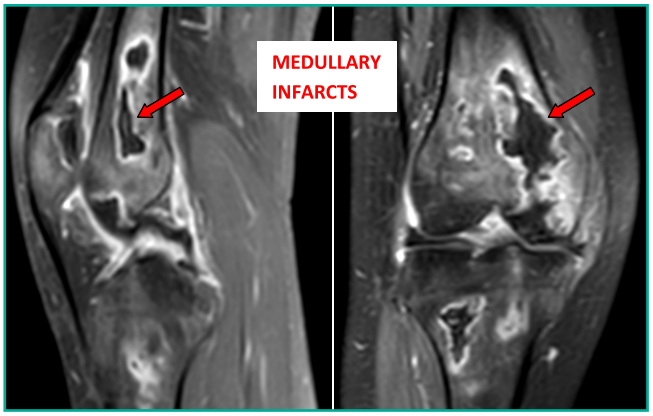


Fig:2 Postcontrast

Discussion

Osteonecrosis is the in-situ death of a segment of bone resulting from interruption of its blood supply. Common radiological findings are included in Table 1 and 2.

Table 1 : Mont and Hungerford Classification[3] (Modified Ficat and Arlet Classification)

	XRAY	MRI
Stage I	normal or minor osteopenia	oedema
Stage II	Cysts and sclerosis present	geographic defect
Stage III	**"Crescent sign"** and cortical collapse	same as plain radiograph "Rim sign" formation
Stage IV	Secondary degenerative changes	narrowing of joint space, osteophyte

Table 2 : Mitchell Classification[1], Stage A representing early and stage D representing late disease.

	T1	T2
Stage A	hyperintense	intermediate
Stage B	hyperintense	hyperintense
Stage C	hypointense	hyperintense
Stage D	hypointense	hypointense

Characteristic signs of osteonecrosis on MRI are Double line sign and Rim sign. In our patient the T1 hypointense serpentine line represents interface between living and dead bone. The hyperintense line represents the granulation tissue. These two lines constitute double line sign.The rim sign represents the fluid in the subchondral fracture with surrounding sclerotic borders[2].

In conclusion, earliest changes, which are seen on MRI, need to be recognized so that timely cessation of steroids and joint preserving surgeries can be done.

References

1. Lovell Wood W., Robert B. Winter, Raymond T. Morrissy and Stuart L. Weinstein. Lovell and Winter's pediatric orthopaedics.Lippincott Williams & Wilkins. Pappas JN. The musculoskeletal crescent sign. Radiology. MEDULLARY INFARCTS
2. Resnick D, Kransdorf MJ. Bone and joint imaging. W B Saunders Co.
3. Karim AR, Cherian JJ, Jauregui JJ, Pierce T, Mont MA. Osteonecrosis of the knee: review. Ann Transl Med

Paracetamol in Dengue Fever – Friend or Foe

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Introduction:

Dengue infection is a global health problem and is responsible for serious illness. WHO classifies dengue fever as dengue with/without warning signs and severe dengue requiring in-hospital treatment. Dengue fever may have atypical presentation with severe organ system involvement (liver, brain, heart etc) with dengue hepatitis being one of the common manifestations of the disease. Paracetamol has come to stay as the most common 'over the counter' drug for fever in children which also happens to be the commonest pharmaceutical agent involved in pediatric overdosing leading to hepatic toxicity.

Case Report:

Here we report a 5 months old male infant, who presented with one day history of fever rash and lethargy. On examination the child was in hypovolemic shock for which he received volume resuscitation. Investigations revealed dengue NS1+ve with anemia, neutropenia and thrombocytopenia. During the course of PICU stay child developed hypoglycemia requiring higher glucose infusion up to 20% Dextrose concentration. Critical sampling done during induced hypoglycemic episode was normal. Liver function test revealed mildly elevated ALT/AST and deranged coagulation profile with no clinical bleeding. On revisiting the history it was found that child received inadvertently higher dose of Paracetamol of 170 mg/kg over 12 hours (toxic dose being > 90 mg/kg/day). Child received N-acetyl Cystein (NAC) infusion and supportive care with clinical improvement and stabilization of desired glucose level over five days.

Discussion:

Dengue ranks as the important rapidly emerged mosquito borne viral illness in recent years and is endemic worldwide. The increasing burden of dengue has been serious global health concern. Approximately 1.8 billion (more than 70%) of the population at risk for dengue worldwide live in WHO South East Asia Region (SEAR) and Western Pacific Region. In 2012, SEAR countries reported approximately 0.29 million cases of which India contributed 20 percent[1]. Dengue virus can cause a spectrum of disease in infants, ranging from asymptomatic infection to mild or clinically significant severe disease similar to older children and adults. The burden of severe dengue lies predominantly in infants 4-9 months of age[1].

Acute liver failure and hepatic encephalopathy in dengue fever, usually occur at a median of 5-13 days from the onset of fever[2]. AST in dengue had been reported to peak at about seven to eight days after the onset of illness and the ALT lags behind AST in time and magnitude[3]. Hence, if any child presents with acute liver cell failure in 2-3 days of onset of illness one should consider causes of liver failure other than dengue hepatitis. Paracetamol poisoning is one such cause, which may get neglected if proper clinical history is not obtained.

Paracetamol is considered to be safe and effective medication used for fever control. The over the counter available formulations of Paracetamol in India includes syrup as 5ml = 125/250 mg and drops 1ml = 100 mg, making it easily available for the population at large. Proper understanding of formulation, dose and frequency of this drug is important especially for young children. Dose given more than the daily recommended dose (75mg/kg/day) is likely to have adverse effects especially with one or more associated risk factors.

There have been evidences both in vitro and in vivo, that the metabolism of Paracetamol is reduced in patients with hepatitis [4,5], which indicates that one should be even more careful in prescribing this medication in dengue hepatitis. Prompt diagnosis of Paracetamol poisoning and effective treatment with N-acetyl Cystein is recommended to prevent further hepatic necrosis.

This child who presented in febrile phase with the history of inadvertent ingestion of Paracetamol drop @ 170 mg/kg received NAC infusion and supportive care. Hypoglycemia and hyperglycemia are known association which should be quickly identified and treated accordingly. This child required higher glucose infusion up to 20% dextrose concentration. The induced critical sample reported within normal range hence this hypoglycemia was attributed to hepatopathy. Over the period of time child improved clinically with resolution of hypoglycemia, anemia, neutropenia and thrombocytopenia.

Conclusion:

Dengue virus can cause a spectrum of illness in infants ranging from asymptomatic infection to severe disease. The burden of severe dengue lies predominantly in infants 4-9 months of age. One should be careful in the administration of repeated doses of Paracetamol in children with dengue where the metabolism of Paracetamol could be impaired. As far as possible, Paracetamol drops formulation should be prescribed with due care.

References

1. www.searo.who.int/india/national_guidelines_clinical_management_dengue. 2015.
2. Tan SS, Bujang MA.The clinical features and outcomes of acute liver failure associated with dengue infection in adults: a case series. Braz J Infect Dis. 2013 Mar-Apr; 17(2):164-9.
3. Kuo CH, Tai DI, Chang-Chien CS, Lan CK, Chiou SS, Liaw YF. Liver biochemical tests and dengue fever. Am J Trop Med Hyg.1992; 47:265–70.
4. Jorup-Ronstrom C, Beermann B, Wahlin-Boll E, Melander A, Britton S. Reduction of paracetamol and aspirin metabolism during viral hepatitis. ClinPharmacokinet 1986; 11:250-6.
5. Maddox JF, Amuzie CJ, Li M, et al. Bacterial- and viral-induced inflammation increases sensitivity to acetaminophen hepatotoxicity. J Toxicol Environ Health A 2010; 73:58-73.

Case Report: Paediatric Surgery

Unusual foreign body(FB) in bronchus

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Introduction:

Foreign body aspiration in bronchus is a life-threatening emergency. Common between ages of 3 to 6 years, it has a higher incidence in boys [1]. Symptoms range from cough, wheeze to respiratory distress with decreased breath sounds on the affected side. Chest X-ray mostly reveals collapse of the affected lobe. Bronchoscopy and foreign body removal is the definitive management in most cases. Most foreign bodies recovered are organic in nature, peanuts being most common [2]. However, sharp objects are occasionally found which block airway and are difficult to remove. Rarely, open surgical removal is warranted, which is a high risk procedure.

Case Report:

A five year old female child was transferred to Lilavati hospital with a twenty-four history of having swallowed a small sharp object. History revealed that the child had accidentally swallowed a small metal two pronged LED (light emitting diode) bulb. Foreign body was seen in left thoracic cavity on chest x-ray. Endoscopic removal was attempted as it was presumed to be in the GI tract. Later on repeat x-ray and confirmation of foreign body in left lower lobe bronchus, bronchoscopy was done. The procedure however failed and child went into asystole post bronchoscopy, requiring cardio-pulmonary resuscitation and four DC shocks to the heart. Endo-bronchial bleeding was encountered and child required mechanical ventilation. She was then transferred to Lilavati where a CT chest with virtual bronchoscopy was done. A two pronged foreign body was seen in the left lower bronchus, inverted with prongs facing upwards, embedded in lung parenchyma, in close proximity to the Heart and Aorta. Emergency retrieval was planned. Left posterolateral thoracotomy was done and foreign body was localised anteriorly in left lower lobe. It was carefully removed via 'Bronchotomy', which was then closed with interrupted sutures. Anaesthesia was a challenging aspect as single lung ventilation was required. Child made an uneventful recovery and was discharged on fourth day.

Discussion:

Children between three to six years of age have a tendency to put small objects in their mouth. Food items are most commonly found, especially nuts as they are difficult to swallow. Toy whistles, safety pins, LED, small metallic parts, jewellery are other rare unusual foreign bodies aspirated. With emergence of new range of respiratory foreign bodies, extraction is not always easy [3].

Most common site of impaction in respiratory tract is right bronchus as it is wider and has more direct extension of trachea. Other sites include left bronchus, trachea, sub-glottis, larynx and carina [4]. Symptoms include episodes of choking with intense coughing that subsides spontaneously. Air entry decreases on affected side, causing dyspnoea which can lead to hypoxia, hypercapnia, and cyanosis. Wheezing and respiratory distress occurs if lumen is significantly blocked by foreign body [5]. Radiolucent foreign bodies are visualised on chest X-ray and significant airway block presents as lung collapse. CT chest with 3D reconstruction and virtual bronchoscopy is useful to localise intra-luminal foreign body, especially in case of sharp object.

Gold standard for management is rigid bronchoscopy under general anaesthesia [6]. A good co-ordinating team of experienced anaesthetist and surgeon is a must, especially for infants. One lung ventilation may be required intra-operatively, so endotracheal tube placement is done accordingly. Isolation of the affected lung is technically difficult to achieve in infants and children [7]. It is required to prevent soiling of dependent lung with blood and mucus and to prevent loss of ventilation during bronchotomy. Complications include laryngeal oedema, pneumothorax, pneumomediastinum, subcutaneous emphysema, tracheotomy or need of assisted ventilation [8]. Bronchoscopic removal may fail due to impaction, peripheral location or technical difficulty. This necessitates a thoracotomy, which may be lifesaving procedure. Need for open surgical intervention ranges from 0.3-4% in various published series [9].

Conclusion :

Foreign body aspiration is one of the leading causes of morbidity and mortality in young children. However, when precautions fail, a prompt intervention will minimize long-term complications. Aspirated foreign bodies should be considered as a differential in any young child with unexplained cough. Tracheobronchial foreign body aspirations carry potential risks during and after bronchoscopy.

Image 1: Chest X-Ray – foreign body in left thoracic cavity

Image 2: CT Chest showing inverted foreign body in left lower bronchus

Image 3: 3D reconstruction of CT image

Image 4: Bronchotomy

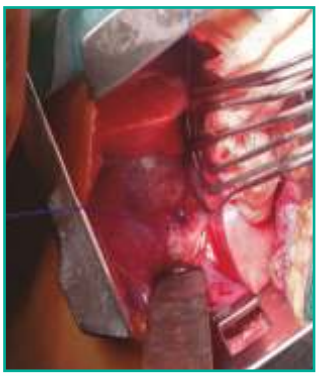

Image 5: Post Bronchotomy and foreign body removal

Image 6: LED bulb

Image 7: Foreign body(LED bulb) post removal

References

1. Hasdiraz L, Oguzkaya F, Bilgin M, Bicer C. Complications of bronchoscopy for foreign body removal: experience in 1,035 cases. Ann Saudi Med. 2006;26:283–287. doi: 10.5144/0256-4947.2006.283
2. Altuntas B, Aydın Y, Eroglu A. Foreign Bodies in Trachea: A 25-years of Experience. Eurasian J Med. 2016 Jun;48(2):119–123
3. Lau C.T., Lan L., Wong K., Tam P.K. A light bulb moment: an unusual cause of foreign body aspiration in children. BMJ Case Rep. 2015 bcr 2015211452.
4. Sinha V, Talagauara Umesh S, Jha SG. Rigid Bronchoscopy in Pediatric Patients. Indian J Otolaryngol Head Neck Surg. 2017;69(4):449-452
5. Jaswal A, Jana U, Maiti PK. Tracheo-bronchial foreign bodies: a retrospective study and review of literature. Indian J Otolaryngol Head Neck Surg. 2014;66(Suppl 1):156–60. doi: 10.1007/s12070-011-0386-4
6. Baram A, Sherzad H, Saeed S, Kakamad FH, Hamawandi AMH. Tracheobronchial Foreign Bodies in Children: The Role of Emergency Rigid Bronchoscopy. Glob Pediatr Health. 2017;4:2333794X17743663. Published 2017 Nov 28. doi:10.1177/2333794X17743663
7. Kiran S, Ahluwalia C, Chopra V, Eapen S. Bronchotomy for removal of foreign body bronchus in an infant. Indian J Anaesth. 2014;58(6):772-3.
8. Brkic F, Umihanic S, Altumbabic H, et al. Death as a Consequence of Foreign Body Aspiration in Children. Med Arch. 2018;72(3):220-223
9. Zhijun C, Fugao Z, Niankai Z, Jingjing C. Therapeutic experience from 1428 patients with pediatric tracheobronchial foreign body. J Pediatr Surg.2008;43:718-21.

Fun Time

1

Autoimmune disorder are contagious

a) True b) False

2

There are
how many Autoimmune disorders?

a) Under 20 b) Under 40
c) Under 60 d) Over 80

3

Which of the below conditions
are NOT Autoimmune disease?

a) Psoriasis b) Ischemic Heart Disease
c) Rheumatoid Arthritis d) Multiple Sclerosis

4

Autoimmune disorders
often run in families?

a) True b) False

5

In Automimmune disorder
the antibodies attack?

a) Only certain organ b) Multiple organs
c) Both

6

Which tests are used
to diagnose Autoimmune disorder?

a) Antinuclear antibody tests b) CBC
c) Autoantibody tests d) All of the above

Kindly email us your answers on
medicaltimes@lilavatihospital.com

Straight from the Heart - Patient Testimonials

My parents go twice a week to the physiotherapy section and I would recommend that their staff knows their job very well & take great care...even the hospital staff is very caring towards senior citizens...I have used their OPD n pathology dept too...excellent...
Nandini Kaul

The doctors & entire staff taking caring of patients are good. We are fully satisfied and Thankful to entire Hospital staff specially Stroke Unit staff!
Rejina Bandia

Well organized and structured services. The way in which the tests were conducted was excellent. Staff was well behaved and knowledgeable.
Neha Netrey Powdwal

I liked the courteous behaviour of each staff member. Found your staff has created a very beautiful environment which is very unlikely in a hospital. Smiles and Humility brings lot of positive vibes in this hospital. I don't find in any other corporate hospital chain !
Yash Parashar

Hospital is neat and clean. Staff was very caring in health checkup dept. Guiding the patient very professional manner thus avoiding inconvenience to patient.
Bhupendra Dasila

All doctors are phenomenal, staff was very supportive and most of the doctors who come for check-ups were superb! Everything was very clean, safe & hygienic!
Aaradhya Gupta

I had taken my father to Lilavati hospital to consult a Urologist. After the preliminary check-up, doctor advised to have Sonography of prostate gland. We were waiting for his number to come through queue. In mean time he couldn't control his loo and his pant got wet down the line. I could see his helplessness and humble face to manage the situation. I could find a staff nurse around and shared the difficulty and requested her if she can help with a trouser on chargeable basis or returnable basis. She immediately managed the cleaned trouser from hospital store without charging anything with great courtesy very quickly going out of the way. I salute that nurse in Lilavati Hospital who helped without any baggage of relationship but for her gut feelings.
Ravi Mishra

Benevolence

The social service wing of the hospital - SEWA serves to the health requirements of needy people. This department seeks to bridge the gap between the needy patients and the fast evolving medical technology. Various social activities such as free OPD, services to senior citizen, sending mobile vans to Adivasi areas to organize free health check-up camps, free camps are undertaken as an on-going process. The Roshni Eye Bank managed by Lilavati hospital is a well-equipped comprehensive centre for cornea removal, processing, storing, supplying and corneal transplantation.

Under this service Lilavati Hospital & Research Centre offers:

1. Free OPD
2. Health Check up Camps at Nana Nani Parks
3. Mobile Clinic
4. Roshni Eye Bank

BENEFICIARIES for F.Y 2017-2018	
Free OPD	14,140
Mobile Clinic	20,712

Free general medical screening and medicine distribution was carried out on 5th & 6th Dec, 2018 on the occasion of Dr. Ambedkar Mahaparinirvan Diwas

Services Available

MEDICAL

Anesthesiology
Audiology and Speech Therapy
Cardiology
Chest Medicine
Chronic Pain Management
Dental
Dermo Cosmetology
Diabetology & Endocrinology
Gastroenterology
Diagnostics &Therapeutic Endoscopy
Haematology
Hair Transplant
Head and Migraine Clinic
Internal Medicine
Infectious Diseases
Lactation
Medical Oncology
Chemotherapy
Nephrology
Neurology
Psychiatry / Psychology / Neuropsychology
Physiotherapy
Pediatrics
Rheumatology
Sleep Medicine

SURGICAL

Bariatric Surgery
Cardiothoracic Surgery
Cochlear Implant Surgery
Colorectal Surgery
Diabetic Foot Surgery
Endocrine Surgery
ENT and Head & Neck Surgery
Gastro Intestinal Surgery
General Surgery
Gynecology, Obstetrics & IVF
Minimal Invasive Surgery
(Laproscopic Surgery)
Neuro Surgery
Onco Surgery
Ophthalmology
Orthopedics, Sports Medicine
Pediatric Surgery
Plastic & Reconstructive Surgery
Spine Surgery
Transplant: Cardiac, Corneal, Kidney & Liver
Urology, Andrology
Vascular Surgery

24 HRS IMAGING

CT Scan
Interventional Radiology
MRI
CATH Lab
Sonography
X-Ray

CRITICAL CARE

Intensive Care Unit (ICU)
Intensive Cardiac Care Unit (ICCU)
Neo-Natal Intensive Care Unit (NICU)
Paediatric Intensive Care Unit (PICU)
Paralysis & Stroke Unit
Surgical Intensive Care Unit (SICU)

DIAGNOSTICS

Audiometry
EEG / EMG
Health Check-up
BMD
Mammography
Non Invasive Cardiology
Nuclear Medicine
PET & SPECT CT Scan
Urodynamics

24 HRS LABORATORY SERVICES

Blood Bank
Histopathology
Microbiology
Pathology

OTHER 24 HRS SERVICES

Ambulance
Emergency
Pharmacy
Roshni Eye Bank

THANK YOU

Patrons for posing faith in your Trusted Healthcare Partner &
all our Doctors and Staff for making Lilavati Hospital
the preferred Healthcare Destination

ALL INDIA CRITICAL CARE HOSPITAL RANKING SURVEY 2019

Bags #1 Position in MUMBAI and WESTERN REGION Rankings in:

- Cardiology
- Emergency and Trauma
- Gastroenterology and Hepatology
- Gynaecology and Obstetrics

Ranked amongst TOP 10 Hospitals NATIONALLY in:

- Cardiology
- Emergency and Trauma
- Gastroenterology and Hepatology
- Gynaecology and Obstetrics
- Neuro Sciences
- Oncology
- Paediatrics

The facts have spoken for themselves, Lilavati Hospital bags the top rankings in the prestigious All India Critical Care Hospital Ranking Survey 2019 published by The Times of India.

Best Single Specialty Hospital – Cardiology of the year 2018
by Prime Time Global Healthcare Excellence Awards 2018

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CNBC-TV18's INDIA HEALTHCARE
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TOP 15 BEST HOSPITALS IN INDIA 2018

No.1 Single Location Multispecialty Hospital
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