SPICES & HERBS CAN HELP YOU STAY HEALTHY DIGITAL TRANSFORMATION IN HEALTHCARE



NEWSLETTER





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Health is the greatest gift, contentment the greatest wealth,

faithfulness the best relationship." - Buddha

FROM THE CEO'S DESK



Greetings!

This quarter has been both challenging and positively inspiring for us at Jehangir Hospital; in terms of a growing number of people getting fully vaccinated, the introduction of booster doses and vaccines for the age of 15 to 18 years. While the growing number of new COVID-19 variant of Omicron cases in the third wave kept us on our toes, our wonderful, highly talented and motivated doctors, paramedics, support staff and all the employees reinforced the fact that hope outshines all.

By the time the Omicron wave plummeted, all our associates at Jehangir Hospital had taken their booster shots and things were back on track. Jehangir Hospital continued to keep adding care and this is what inspires me to be a part of this wonderful organisation. The zeal to provide selfless world-class healthcare at an affordable cost has always been our motto. We also take pride in the fact that we have vaccinated more than one lakh ten thousand people, not only at our hospital but at their doorstep, be it at their societies, workplace or schools.

Early in the COVID-19 pandemic, technology use in terms of telehealth usage surged as consumers and providers sought ways to safely access and deliver healthcare. Technology's role in healthcare has expanded exponentially. Our ability to store, share and analyse health information is directly tied to improved technology. We're moving into

an era where physicians can see patients remotely and accurately diagnose a patient's problems, even in the most rural areas, through telemedicine. We've progressed from using technology to improve

patient care and the healthcare industry to impact our society as a whole. Well, such is the impact of technology in healthcare. It brings about a paradigm shift in the way we deliver care.

At Jehangir Hospital, our journey during the last year has been interesting as we embarked upon a paradigm shift by digitally enabling our teams to deliver patient-centric healthcare. Many digital initiatives were rolled out successfully with the support of our consultants, administrative heads and staff. To name a few of these initiatives: Upgradation of our contact centre with the latest state-of-theart technology and installation of new IPBX system. This system is a secure, reliable communications solution that brings the right features and functionalities when compared to the traditional systems and thus helps deliver the best experience. PACS (Picture Archiving and Communication System) is a medical imaging technology used to securely store and digitally transmit electronic images and clinically-relevant reports. The best benefit of the PACS system is that it provides easy and quick access to patient images and reports. BOTS (Blood Order & Transfusion Safety)-A unique digital platform for online blood ordering and transfusion safety enables real-time communication between the

Our ethos is to ensure delivering quality healthcare which is affordable and accessible ""

Vinod Sawantwadkar

CEO - Jehangir Hospital

hospital and blood centre for blood ordering, order tracking, Haemovigilance and adverse reaction reporting & document record management system. With DocuPHI, we can store the digitised patient information in a structured and collaborative space that's accessible anytime, digitally. The end-to-end digital transformation of healthcare with the help of technology is something we, at Jehangir Hospital, have in our future plan of action. Many digitally savvy healthcare organisations are already aligning their people, processes, and culture to achieve their long-term digital success and having all such systems within Jehangir Hospital will soon be a reality. The journey has already begun and the sky is the limit for us. Many growth opportunities result from digitisation, which is only just a

beginning in many dimensions, as well as the related necessities for interoperability - the ability to interact - with improved protection of medical data and infrastructure at the same time. Never before has it been so obvious, how much digitisation can help - or even how much is missing, if the digital transformation has only started.

2022 marks the $77^{\mbox{\tiny th}}$ year of Jehangir Hospital and with each passing year, we've grown stronger, better and bigger. It's not just a statement, but at Jehangir Hospital, we witness history in the making

> in every department, every day. Hundreds of patients visit our hospital on a daily basis and we've had many instances where the patients have left us with a great testimony that we proudly share with the world. When

they open up and share their hearts out, it inspires each and every healthcare provider who puts their heart & soul into ensuring the well-being of the patients, and it also adds more strength to our foundation of care.

As we continue our journey, WE ALWAYS REMIND OURSELVES of our purpose; to heal, restore, and foster healing by providing care that is best, safe, and focused on achieving the highest potential outcomes for the patients and community.

Enjoy the copy of this newsletter. I look forward to talking to you again through the next issue of 'Dialogue".

Stay Safe!

Vinod Sawantwadkar CEO - Jehangir Hospital



RESEARCH ON OMICRON

All you need to know about the Variant of Concern

Omicron (B.1.1.529) variant was first reported to WHO from South Africa on 24th November, 2021. The first known confirmed Omicron infection was from a specimen collected on 9th November, 2021. This variant has a large number of mutations, some of which are concerning. The number of cases of this variant appears to be increasing in almost all provinces in South Africa. There are a number of studies underway and WHO will communicate new findings with Member States and to the public as needed.

CURRENT KNOWLEDGE ABOUT OMICRON

Researchers in South Africa and around the world are conducting studies to better understand many aspects of Omicron and will continue to share the findings of these studies as they become available.

Transmissibility: It is not yet clear whether Omicron is more transmissible (e.g., spreads more easily from person to person) compared to other variants, including Delta.

Severity of disease: It is not yet clear whether infection with Omicron causes more severe disease compared to infections with other variants, including Delta. All variants of COVID-19, including the Delta variant that is dominant worldwide, can cause severe disease or death, in particular for the most vulnerable people, and thus prevention is always key.

STUDIES UNDERWAY

At the present time, WHO is coordinating with a large number of researchers around the world to better understand Omicron. Studies currently underway or underway shortly include assessments of transmissibility, severity of infection (including symptoms), performance of vaccines and diagnostic tests, and effectiveness of treatments.

WHO encourages countries to contribute the collection and sharing of hospitalised patient data through the WHO COVID-19 Clinical Data Platform to rapidly describe clinical characteristics and patient outcomes.

OMICRON IN INDIA

Health experts in India have expressed mixed views on the new study in Africa that found Omicron can partially evade protection from two doses of Pfizer BioNTech COVID-19 vaccine and protection is more pronounced in those who received two doses of the vaccine and had a prior infection.



Experts in India, however, believe India is likely to have much more hybrid immunity than other nations against the heavily mutated Omicron and hence are better protected.

Indian Council of Medical Research (ICMR) Director General, Balram Bhargava, laid down a few measures stating the dos and don'ts everyone must follow to contain the rising cases of the Omicron variant.



The Union Health Ministry recently announced that Bharat Biotech's Covaxin will be the only vaccine that will be administered to eligible recipients in the age group of 15-18 years. The decisions to vaccinate adolescents and administer a precautionary dose to vulnerable groups were taken in view of the recent global surge of coronavirus infections, detection of the new Omicron variant of the virus,

scientific evidence, global practices, and the inputs/suggestions of 'COVID-19 Working Group of National Technical Advisory Group on Immunization (NTAGI)' as well as of 'Standing Technical Scientific Committee (STSC)' of NTAGI.

"Children born in 2007 and earlier shall be eligible to receive the vaccine", the ministry said. Beneficiaries can register online through an existing account on Co-WIN, or after creating a new account through a unique mobile number. Children

can book a slot using their parents' existing Co-WIN accounts.

The health ministry's guidelines said children could be registered onsite by the verifier/vaccinator in facilitated registration mode; appointments can also be booked online or onsite (walk-in). All beneficiaries irrespective of their income status are entitled to get vaccinated for free at the government vaccination centres. However, those who visit private hospitals or vaccination centres have to pay the requisite fees.

A total of 3.31 crore children in the age bracket of 15 to 17 years have already received their first dose, accounting for almost 45% coverage, just 13 days into the drive on January 3 this year.

DOs:

- · Take your due vaccination shots
- Get the booster shots, if eligible
- · Continue to wash your hands regularly
- · Maintain social distancing in indoor and public spaces

DON'Ts:

- · Avoid non-essential travel and mass gatherings
- · Avoid touching your face · Avoid indoor crowds
- · Observe low-intensity festivities
- · Do not take off your masks even if you're fully vaccinated







The history of spices is the history of humankind itself, with empires rising and falling based on the trade of exotic spices from distant lands, their intoxicating allure has changed and shaped the very foundations of our society. Christopher Columbus set sail for the Indies (following the unorthodox notion of getting there faster by heading in exactly the wrong direction), he was searching for peppernot gold or jewels, but pepper and other spices. He never found the passage to the



Indies he was hoping for, and he never found the pepper he was searching for, but the world was changed forever because of our passion for strange new flavours from faraway places.

As per several researches, there is now ample evidence that spices and herbs possess antioxidant, anti-inflammatory, anti-tumorigenic, anti-carcinogenic, glucose, and cholesterol-lowering effects as well as properties that affect cognition and mood.

Research over the past decade has reported on the diverse range of health properties that the spices possess via their bioactive constituents, for example sulphur-containing compounds, tannins, alkaloids, phenolic diterpenes, and vitamins, especially flavonoids and polyphenols. Spices and herbs such as clove, rosemary, sage, oregano, and cinnamon are excellent sources of antioxidants with their high content of phenolic compounds. It is evident that regular intake of spices in our foods was also linked to a lower risk of death from cancer and ischaemic heart and respiratory system diseases. However, the actual role of spices and herbs in the maintenance of health, specifically with regards to protecting against the

development of chronic, noncommunicable (lifestyle related) diseases, is currently unclear. Hence, this article summarises the potential health benefits of commonly used spices and herbs such as chilli pepper, cinnamon, ginger, black pepper, turmeric, fenugreek, rosemary, and garlic.

According to the nutrition researches, there are more than 100 different types of spices & herbs which are available worldwide. They are used in daily meal preparations that are proven to be good sources of antioxidants and help in protecting cells from damage.

As India is blessed with a varied climate, each of its state produces some spice or the other. No wonder why spices are used so extensively for cooking in India. Not only in India but also in some other countries, spices are considered to be of great use. Apart from adding colour, flavour and taste, consumption of spices provide infinite health benefits.

One can be creative with the use of spices while preparing meals, keeping in mind its benefits towards health. Some spices can also be used as home remedies such as skincare. With the worldwide awareness of varied spices $\mathcal E$ herbs, one can find these spices in the local market making them easily available at a better cost.



From left to right: Mr. Venkatesh Indila - Cook | Mr. Sunilkumar Panikar - Assistant Supervisor - F&B Chef Sachin Mali - Head Chef | Ms. Madhvi Kumari - Senior Executive Clinical Nutritionist Dr. Shilpa Edathara - General Manager - Operations | Dt. Richa Shukla - Head, Clinical Nutrition Mrs. Karuna Yerunkar - Multiple Purpose (Chapati Making)

SOME COMMON USED SPICES

Cinnamon: This popular spice comes from the bark of the cinnamon tree and is used in everything from tea to desserts. Cinnamon is especially great for people who have high blood sugar. It lends a sweet taste to food without adding sugar and studies indicate it can lower blood sugar levels in people with Type 2 diabetes. Cinnamon may also provide heart-healthy benefits, such as reducing high blood cholesterol and triglyceride levels. This makes it extremely important for people with diabetes who are at a greater risk of developing a heart disease.

Cinnamon is not a replacement for diabetes medication or a carbohydratecontrolled diet, but it can be a helpful addition to a healthy lifestyle.

Quick Meal tip: Try sprinkling its powder on yogurt, fruit or hot cereal, or use it in curries and desserts.

Turmeric: Turmeric is best known for its use in curry dishes and has become a trendy superfood for its ability to reduce inflammation, a common cause of discomfort and illness. The bioactive compound found in turmeric is curcumin which has anti-inflammatory properties, reduces pain and swelling of those who suffer from arthritis as well as it is one of the best antiseptic, also used in common cold.

When used for any preparations, turmeric should be combined with black pepper for better bio-availability of the compound, essentially benefitting one's health.

Quick Meal tip: Want to add this powerhouse spice to your diet? Rub it on roasted vegetables and meats or create a

Ginger: Ginger is a tropical plant that's been used in Asian cultures for thousands of years to treat stomach upset, diarrhoea and nausea.

Some studies have also found that ginger cuts the severity of motion sickness or prevents the symptoms altogether.

Quick Meal tip: Work this zingy spice into your diet by adding it to stir-fry dishes, or sipping it in tea.

Garlic: Most of us are familiar with garlic, the strong-smelling bulb frequently used in cooking.

Researchers have linked garlic intake with keeping blood vessels flexible, especially in women. In addition, studies suggest that eating garlic may reduce cholesterol and triglycerides.

Quick Meal tip: Pair fresh or powdered garlic with olive oil and pepper to flavour vegetables or use it with rosemary to make a tasty salad. You can sprinkle it in soups and salad dressings, too.





Insta

RISPACS

At Jehangir Hospital, our journey during the last year has been interesting as we embarked upon a paradigm shift by digitally enabling our teams to deliver patient-centered healthcare. Many digital initiatives were rolled out successfully with the support of our consultants, administrative heads and our staff.

It brings us a sense of pride to present some of these initiatives.

PACS (Picture Archiving and Communication System) is a medical imaging technology used to securely store and digitally transmit electronic images and clinically-relevant reports

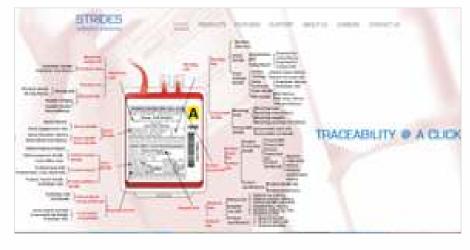


The best benefit of the PACS system is that it provides easy and quick

access to patient images and reports. The staff can also submit reports; transport or archive images, and view them remotely through portable media. The numerous PACS terminals throughout the hospital allow simultaneous multilocation viewing

of the same image, if desired, whereas conventional film can only physically exist in one place at any one time.

DIGITIZATION SUPPORTS THE DELIVERY OF INTEGRATED CARE

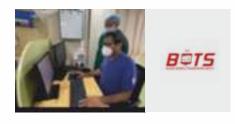




With the help of SafeTrans application, a unique Vein to Vein Blood transfusion traceability software configured at Jehangir Hospital helps support good transfusion practice by employing blood transfusion and logic rules. It tracks record and acts on each step of the blood

selection to the blood component being transfused to the patient. Safe Trans enables blood banks to eliminate cognitive process-based bias errors from every process. It ensures that, under a defined set of circumstances, the system will consistently take the actions specified as per the blood transfusion rules configured.

transfusion process, right from donor



A unique digital platform for online blood ordering and transfusion safety enables real-time communication between hospital and blood centre for Blood ordering, order tracking, Haemovigilance and adverse reaction reporting.

DOCUMENT RECORD MANAGEMENT SYSTEM

Digital technologies offer opportunities to revolutionise the way care and services are delivered Technology is reshaping the relationship between patients, doctors and the hospital's systems.

One such initiative is the Document Record Management System, which helps in storing the digitized patient information in a structured and collaborative space that's accessible anytime, digitally without compromising the data privacy and confidentiality of records. User logins and rights are defined accordingly.



A customizable WEB based RIS/PACS solution designed for single hospitals or medical centers

ONLINE PRESCRIPTION TELECONSULTATION



To add to the OPD's digital experience, doctors can

write digital prescriptions and also offer online prescriptions that can be routed to the pharmacy for filling. Patients on their way out can pick up the medicines from the outpatient pharmacy.



IPBX SYSTEM

The patients' experience at the contact centre has now been improved with the installation of a new IPBX system.

This system is a secure, reliable communications solution that brings the right features and functionalities when compared to the traditional systems and thus helps deliver the best experience.



Technological advancements when extended to the patient's bedside can support in accomplishing significant contributions in patient safety. One such initiative was the electronic modified early warning scoring system.

This initiative won accolades at FICCI Healthcare Excellence Awards in patient safety. A nurse after having assessed the patients for vital, records these in the simple calculator given to her on a mobile tablet device. It has a dropdown menu to capture the vitals. After saving these vitals based on the score obtained, an auto-alert is generated to the residents/consultants and senior nurses. A rapid response is activated and the patient gets immediately reviewed for escalation in care.

For the first time, patients are now being allowed to record their pain score via a link that is shared with them on their mobile phones by the pain management nurse. Patients can now report or escalate their score and get a real-time response from the treating team. Their responses reach the Pain nurse via an SMS and this information allows her to review the patient immediately for pain management. Digitization has made care and service delivery more empathic, delightful, personalised, and modern. The process is completely hassle-free and data analysis has become much simpler.

Digitization has allowed tremendous benefits in many ways. Accurate and automated data collection, combined with data-driven decisions, cuts down costs and, most importantly, minimises errors. The care delivery improves, patient experience is enhanced, staff management gets transparent, operational management efficiency sets in.



The urge for transformation has set in and newer applications will be making their way to build more efficiency. Soon a QR code-based concierge service shall be installed to make the patients' inpatient stay seamless.

By scanning the code provided in the patient rooms, patients can practically demand services from Nursing, Housekeeping, F&B and Maintenance. This solution enables patients to request & stay informed in real-time while helping admin staff to understand who is working on the jobs, the TAT, and even get escalations for delayed jobs. The nursing staff benefits immensely as they get to focus on medical assistance rather than coordination/communication between patients and operations staff.





JEHANGIR ADVANCED CENTRE OF CARDIAC SCIENCES

4D echocardiogram has recently been introduced in Jehangir Hospital.

An echocardiogram is an advanced ultrasound test that creates images of the heart. Instead of using 3D technology, the 4D system creates a live video effect. This can also be used for prenatal tests. Since it will give you real-time images and videos, it will provide your doctor with an accurate evaluation of your

heart. It will be easier to see its function and structure with this innovative technology. Even the condition of the heart chambers and valves can be seen using this test.

The benefits of 4D echocardiography can help a lot of patients who are suffering from heart-related diseases. It's a one-hour process that's perfectly painless and can be done without much adjustment to your schedule. At Jehangir Hospital, we strive to provide the best services to our patients.

FEATURES OF 4D ECHOCARDIOGRAPHY

It helps resolve heart-related diseases

It's an Advanced Ultrasound Test

It can identify changes in the heart

It's developed from 3 types of imaging methods

It takes about an hour to complete

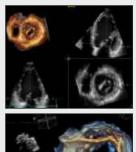


IT HELPS RESOLVE HEART-RELATED DISEASES

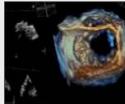
The images acquired from this test can assist in treating various heart diseases. Detailed representation and imaging assist in facilitating the analysis of coronary artery diseases, rhythmic disorders, and more. The test helps doctor see the size, shape, thickness, and movement of your heart. It can depict how your heart moves and how strong it pumps. Doctors can see if your valves are working correctly or if there are any leaks. The 4D ultrasound system also lets your doctor know if your heart valves are too narrow and if there are any abnormal growths or tumours around it.

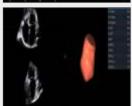
The following can also be found using 4D echocardiography:

- Problems with pericardium or outer heart lining
- Large blood vessels that enter and exit the heart
- Blood clots in heart chambers
- Holes between different heart chambers





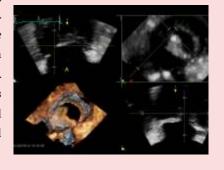




IT CAN IDENTIFY CHANGES IN THE HEART

4D echocardiography is an excellent screening method. For example, patients who are using cardio-toxic medications for cancer treatment can get proper screening and diagnosis to see the health of the heart. If the patient has received radiation in the chest area, a 4D echocardiography can help see if the area is in normal condition. For patients with certain heart diseases such as cardiomyopathy, pericardial disease, and heart failure, this can be used to monitor their conditions.

This is also especially helpful for patients with pacemaker implants.



4D KEY HIGHLIGHTS:

4D TTE imaging: High volume with an excellent special resolution

4D Speckle Imaging: Quickly understand the complex blood issues

4D Strain Imaging: Advanced technology to assess Global & regional Heart function

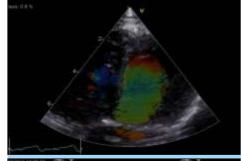
Flexilight: Advanced Visualisation of Internal heart structure using a light source

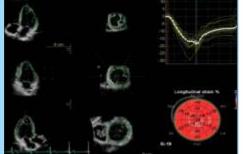
4D Transesophageal Echo (TEE) Imaging: Enhanced overview of Heart structures and function in cases with high and / or irregular heart rhythm

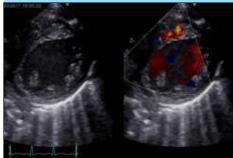
Paediatric & Neonatal Heart Imaging: Paediatric Imaging quality

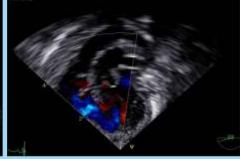
Paediatric & Neonatal TEE: Clearly visualise complex heart conditions in neonatal patients (down to 2.5 kg)

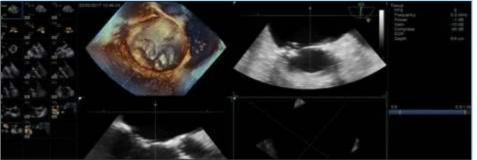
Echopac: Review, post-process, and measurement of important Heart arameters













JEHANGIR HOSPITAL PERFORMS A COMPLEX REDO OPEN-HEART SURGERY ON A 2-YEAR-OLD INFANT!

A 2-year-old had a complex Congenital Heart Disease and upon examination, it was found to have a condition Tetralogy of Fallot and was admitted to our hospital in an extremely ill state.

The 8-kg weighing infant had delayed developmental milestones and was unable to stand without a proper support. The highrisk redo open-heart surgery lasted for six hours. After the reoperation, the kid was shifted to the ICU and subsequently to the ward. Uneventfully, he was discharged on the fifth postoperative day.



The high-risk operation was carried out by the team of pre and postoperative doctors and nurses spearheaded by the expert cardiac surgeon, **Dr. Shrinvas Kini.**

The financially-challenged parents were assisted by the social department of the hospital and the surgery was carried out smoothly without any interruptions. Speaking on this accomplishment, Dr. Kini said that the boy will now be able to live a normal life just like the rest of the kids because his heart condition was now corrected.



ADDING CARE BEYOND SHORES TO TREAT A RARE ABNORMALITY OF THE HEART!

A 14-year-old girl from Yemen was presented with dyspnoea on exertion and exertional palpitation. Her echocardiography showed a coronary cameral fistula arising from the right coronary artery and was opening into the right atrium. This finding was confirmed on CT Angiography and catheter coronary Angiography.

This is one of the rare abnormalities of coronary arteries and the estimated prevalence is 2 per 1,000 people. The majority of cases are congenital and solitary and constitute 0.2 to 0.4% of all congenital cardiac malformations.

Traditionally, these fistulas can be closed with surgical interventions, but it has

several disadvantages over transcatheter closure. There are sternal wounds and associated healing complications with infection, post-cardiac surgery bleeding and associated complications with prolonged hospital stay after the operation. Transcatheter occlusion of coronary cameral fistula with devices is now considered the treatment of choice for

most cases. The availability of newer devices has broadened the scope of management of large fistula which was previously not suitable for device closure.

Dr. Ajit Mehta & Dr. J S. Duggal at Jehangir Hospital successfully closed the Coronary Cameral fistula with a transcatheter device.





INTERVENTIONAL RADIOLOGY

Interventional radiology is a medical sub-specialty of radiology utilising minimally-invasive image-guided procedures to diagnose and treat diseases in nearly every organ system.

The range of conditions that can be treated by IR is enormous and continually expanding. Well-recognised advantages of these minimally invasive techniques include reduced risks, shorter hospital stays, lower costs, greater comfort, quicker convalescence and return to work.











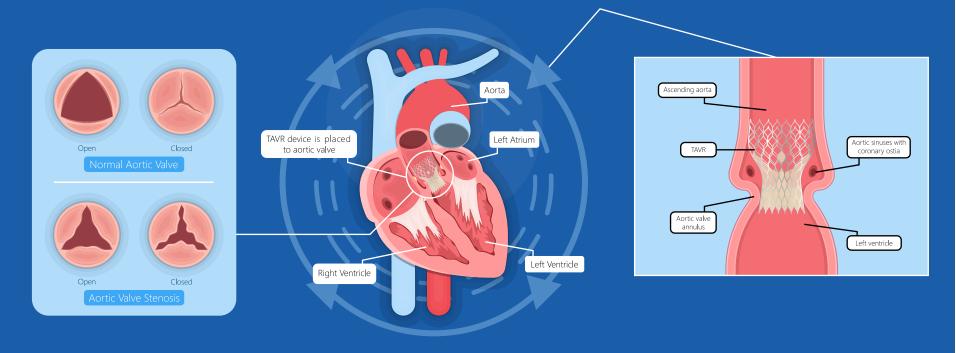




Pune's first hospital with the

TRANSCATHETER AORTIC VALVE REPLACEMENT (TAVR)

to replace an abnormal narrowing of the aortic valve opening (Aortic stenosis)



Transcatheter Aortic Valve Replacement (TAVR) has become a viable alternative to traditional open heart surgery in individuals who have severe aortic valve

stenosis and are of high or prohibitive surgical risk. At Jehangir Hospital, we have already successfully conducted 3 procedures in a row under the able hands of Dr. J S. Duggal and Dr. Ajit Mehta, our senior caediologists. When it comes to comprehensive cardiac care, experience matters. Jehangir Hospital combines some of the most experienced specialists in the region with world-class facilities to provide advanced Transcatheter Aortic Valve Replacements.

WHAT IS TAVR?

This minimally invasive surgical procedure repairs the valve without removing the old, damaged valve. Instead, it wedges a replacement valve into the

aortic valve's place. The surgery may be called a Transcatheter Aortic Valve Implantation (TAVI) or Transcatheter Aortic Valve Replacement (TAVR).

Somewhat similar to a stent placed in an artery, the TAVR approach delivers a fully collapsible replacement valve to the valve site through a catheter. Once the new valve

is expanded, it pushes the old valve leaflets out of the way and the tissue in the replacement valve takes over the job of regulating blood flow.



Right to left:

Dr. J. S. Duggal - Consultant - Head, Department of Cardiac Science and Senior Cardiologist Jehangir Hospital, and Dr. Ajit Mehta - Consultant - Sr. Cardiologist, Jehangir Hospital, with their team



WHAT IS INVOLVED IN A TAVE PROCEDURE?

There are two different approaches to the TAVR procedure, and the cardiologist or surgeon chooses the one that provides the safest way to access the valve:

Transfemoral Approach: Entering through the femoral artery (large artery in the groin), which does not require a surgical incision in the chest.

Transapical Approach: Using a minimally invasive surgical approach with a small incision in the chest and entering through a large artery in the chest or through the tip of the left ventricle (the apex).





BENEFITS OF TAVR

Minimally invasive procedure

Less painful than the traditional open-heart surgery

The hospital stay is reduced to 4-5 days

Offers improved quality of life in patients who cannot undergo traditional aortic valve replacement

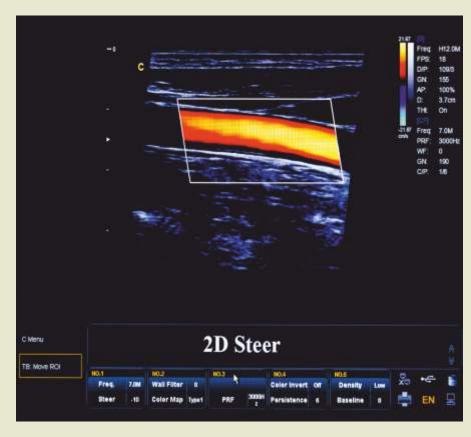
THE CASE AT HAND

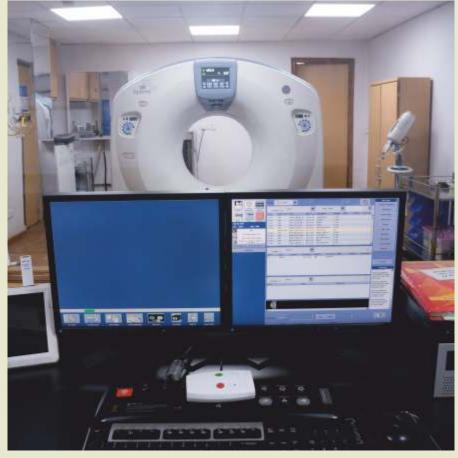
A 58-year-old diabetic gentleman was presented with a Progressive Breathlessness on Exertion for 3 to 6 months.

The breathlessness had worsened since the last two weeks before the presentation. The patient experienced breathlessness on lying down & even at rest.

Coronary Angiography showed mild coronary artery disease.

2D Echo: Echocardiographic assessment showed severe calcific aortic valve stenosis & left ventricular EF of 20% (very low heart pumping) with low gradients. The patient was advised an aortic valve replacement. In view of severe left ventricular dysfunction and left ventricular failure, the patient was at very high risk for open-heart surgery and Surgical Aortic Valve Replacement (SAVR) was declined.





Multi-slice CT Finding: Extensive calcification was noted in the region of the aortic valve. Upon all the necessary investigations, the patient was considered for TAVR.

On admission, the patient had hypotension (Low BP) & was put on high inotropic support (medicines to increase blood pressure).

The patient was taken for the procedure and he underwent a successful TAVR.

The patient came off inotropic support and was discharged in two days. On discharge, the patient had no cardiac symptoms and his ejection fraction was also improved. The patient has been on regular follow-up and is showing significant improvement in his symptoms and heart function.

Follow-up echo showed Normal Ejection fraction and well-functioning of AV valve.



DEPARTMENT OF PAEDIATRICS

JH SUCCESS STORIES

SNAKE BITE - EARLY INTERVENTION SAVED CHILD'S LIMB!

India has seen an estimated 1.2 million (12 lakh) snakebite deaths from 2000 to 2019, an average of 58,000 per year

The inappropriate perception, inadequate awareness, and knowledge about snakes and snakebites are of major concern

Often, snakebites and their complications cannot be identified

A 12-year-old boy was referred to Dr. Sagar Lad, Consultant-Paediatrician at Jehangir Hospital. The boy was in a state of shock. He was initially seen at a city nursing home by Dr. Deshmukh and Dr. Santosh Kait. However, due to the severity of his illness, he was referred to Jehangir hospital.

"He had been bitten by a poisonous snake. Clinically, it seemed to be Russell's Viper (Russell's Viper bite is an occupational hazard of rice farmers throughout its geographical range) bite on his right hand. This was followed by massive swelling of the arm, which caused decreased blood supply and compression of nerves, which lead to decreased sensation.

This complication is called 'compartment syndrome'. If such a condition is not treated urgently, it can lead to amputation. The local effects of snakebite include tissue necrosis, edema, and compartment syndrome. Patients may also be left with permanent physical deformities due to residual sequelae of the snakebite. "Compartment syndrome after a snakebite is an uncommon occurrence and this is because of the toxins liberated by

poisonous snake", commented Dr. Sagar Lad, Senior Paediatric Intensivist at Jehangir Hospital.

Considering the severity of the illness, the child was referred to the senior hand and wrist surgeon at Jehangir Hospital Dr. Vijay Malshikare. "The child also had abnormal blood parameters, clotting system and a low platelet count. His Doppler of the arm showed absent blood flow. Hence, emergency surgical decompression of the whole limb (fasciotomy) was done to relieve the pressure of the hand. This timely surgical intervention saved the boy's limb from amputation", said Dr. Vijay Malshikare.

"It was a high-risk case as abnormal blood parameters and shock state so giving the anaesthesia was challenging", said Dr. Sandhya Sathe, Senior Anestheologist at Jehangir Hospital. The surgery was done in the month of September. After 3 months, the child recovered fully with good movement of the hand. It was a team effort and timely intervention and such complications are not so common after a poisonous snakebite, but awareness in the community is important.







The bubbly four-year-old, Prem, overcame severe COVID-linked pneumonia with Acute Respiratory Distress Syndrome (ARDS) that had kept him strapped to an invasive ventilator for 45 days.

The doctors at Jehangir Hospital said Prem's recovery following such a long period of mechanical ventilation was in all probability the first such case in the world.

"A ventilator support of 41 days following a severe form of COVID is documented in adults. But this is perhaps the first case in the world where a child has fought off adult-like COVID-ARDS for 45 days on ventilator support and recovered," said

Dr. Sagar Lad, Prem's treating doctor and Jehangir Hospital's paediatric intensivist. Lad is also a member of the Paediatric COVID task force in Pune.

Prem was discharged following complete lung recovery after 67 days. This included 45 days on an invasive high-frequency ventilator - an advanced version of mechanical ventilation. "We initially admitted him to a small private hospital in Moshi for fever not responding to medication and chest congestion. His bed was next to an adolescent recovering from post-COVID symptoms. After five days, Prem started gasping," said the boy's father.

Prem's blood oxygen saturation had dropped to 42%, an extremely low oxygen level in blood indicative of severe respiratory distress. A patient with blood oxygen saturation going below 93% $requires \, oxygen \, the rapy \, and \, the \, extremely \,$ low levels in Prem's case necessitated aggressive treatment with invasive ventilator support. The family started searching for a paediatric ventilator bed at different found one at Jehangir hospital. Dr. Sagar Lad mentioned that Prem landed in Jehangir Hospital with extreme COVIDpneumonia.

His High-Resolution Chest Tomography (HRCT) score was 21, showing adult-like acute COVID-pneumonia severity rarely seen in children. He was immediately put on invasive ventilator support but there was not much improvement.

Hence, a special type of ventilator, called a high-frequency invasive ventilator, was used to treat complications of COVIDpneumonia termed as ARDS.

"The boy had a very stormy course in the Paediatric ICU. Every day was challenging. He required high ventilation settings to increase oxygen levels in the blood. He also had air accumulation surrounding the lungs and required a tube to suck the air out," Lad said.

Prem was treated with medicines, including steroids and antiviral. Due to the requirement of prolonged mechanical ventilation, a small hole was made in the windpipe.

According to the hospital's senior paediatric surgeon, Dr. Dasmit Singh, it was technically challenging as his oxygen would tend to drop down during the procedure (tracheotomy).

Prem was treated by a team of expert doctors including the Infectious Diseases expert, Dr. Piyush Choudhari, and Senior Paediatrician, Dr. Sanjay Bafna.

Prem's condition started improving and the doctors started weaning him off mechanical ventilation after 45 days of life support.

Prem's father was delighted to see him smile and recall his stay in the hospital.

After 45 days on ventilator, 4-yr-old boy defeats adult-like Covid-ARDS









Right to left: - Dr. Col. Satyajit S. Gill - Medical Director, JH and Dr. Sagar Lad - Consultant, Neonatologist. JH with patient



DEPARTMENT OF SPINE

CERVICAL DISC HERNIATION

A cervical herniated disc can cause many different types of pain or no symptoms at all. The pain can range from aching in the neck, arm, and/or hand to electric-like pain that radiates into these same areas. Sometimes arm or hand numbness or weakness may also be present.

Cervical disc herniation is the result of the displacement of the nucleus pulposus of the intervertebral disc, which may result in impingement of these traversing nerves as they exit the neural foramen or directly compressing the spinal cord contained within the spinal canal. The symptoms of cervical disc herniation commonly start spontaneously.



Normal cervical Disc



Herniation of cervical Disc

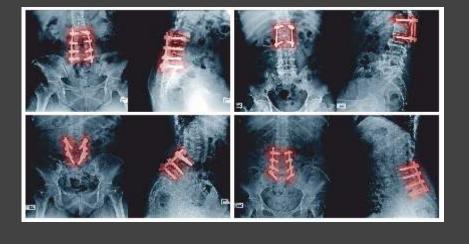
MICRODISCECTOMY

Microdiscectomy is a surgical procedure to eliminate the damaged portion of a herniated or slipped disk in your spine that is pressing on a nerve root or the spinal cord. When surgery is indicated, Microdiscectomy is the goldstandard surgical procedure for treating pain due to disc herniation.

While performing Microdiscectomy, surgeons often make use of general

anesthesia. Small fragments of spinal bone and ligament may be taken out to reach the herniated disk.

Preferably, the surgeons just remove the fragment of disk that is pinching the nerve. It relieves the pressure but leaves most of the disk undamaged. This is almost a blood less surgery and takes about an hour. The pain relief after the surgery is instantaneous and gratifying.

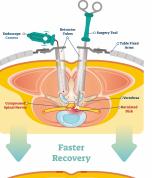


MINIMALLY INVASIVE LUMBAR DECOMPRESSION

Lumbar stenosis is narrowing of the vertebral canal, and is a common condition that can result in compression of the nerves in the low back which leads to gripping pain in the legs while walking. When stenosis is mild, it can be treated with medicines and physiotherapy. When severe and significantly affecting lifestyle, this condition needs surgery. With the advent of modern spine surgery practice, this surgery can be done through minimally invasive approach. The surgeon takes a very small incision to reach the spine.

The nerves are decompressed through small holes without much handling of the muscles, joints and bones.

This procedure gives good pain relief and patients and walk the same day after the surgery and can expect to go home a day after the procedure. There is no need of bed rest and patients can gradually resume their light duties within a few days. Minimally invasive spine surgery has been our preferred technique of treating patients with spinal stenosis and till date, thousands of patients have benefited out of it.





IDEAL SPINAL CONDITIONS TREATED WITH MINIMALLY **INVASIVE SPINE SURGERY:**

- · Lumbar stenosis
- Disc herniation or slip disc
- Spinal infections
- · Spinal instability including spondylolisthesis
- Vertebral fractures
- · Spinal tumors





Laminectomy is surgery where the surgeon creates space by removing a part or all of the vertebral bone known as the lamina - the back part of a vertebra that covers your spinal canal. This procedure helps relieve the pressure on the spinal cord or the nerve roots that may be caused by injury, herniated disk, narrowing of the canal (spinal stenosis), or tumors. Identifying the need The presence of a herniated disk is one the common reasons to opt for laminectomy procedure. Other than that, when there's unbearable pain in the spine that restricts your ability to move and function, this surgery is recommended.

HOW TEAMWORK CAN PUSH US TO DELIVER THE BEST OF OUTCOMES!

This was a 60-year-old lady with degenerative scoliosis. She was suffering from severe pain and even walking and day-to-day activities were difficult for her.

She had consulted Dr. Mayur Kardile a year back who had suggested a staged surgery with a transabdominal approach &posterior fixation. As with any new technique, this patient was highly skeptical and did not want a Transabdominal Spine Surgery. Exactly after one year of the first consultation, she signed up for the surgery. The patient had multiple health issues, hypothyroidism, anaemia, supraventricular tachycardia which Dr. Sarita Kulkarni and Dr. Ajit Mehta managed and got the patient fit for surgery. Anaesthesia considerations were very critical in this surgery and Dr. Archana Jana and Dr. Sameer Bhosle managed it in the best way.

The 4-level anterior lumbar fusion was done to correct her lumbar lordosis. **Dr. Sachin Vaze** was great support for this case. His dissection was impeccable with absolutely no blood loss and the patient had a painless surgical experience. She was in the ICU for post-operative observation and the ICU team made sure to keep each of her parameters in check. The second stage was after 4 weeks wherein we did posterior instrumentation and fusion.

Dr. Sameer Bhosle managed her pain with continuous epidural infusion in the post-op period. The patient came to me for her 6-week follow up. She says she has been the happiest and the most pain-free in her life after this surgery which has been her life-changing experience! She can now walk over 2 km and has been enjoying her life to the fullest.



Consultant - Spine Surgeon, JH

Most ultramodern spine surgical techniques were used for this patient, be it anterior lumbar instrumentation, cadaveric allograft, recombinant bone morphogenic protein, cement augmented pedicle screws, spinopelvic fixation, sublaminar wire augmentation and neuromonitoring. All this is nothing short of the best practices in the most advanced spine centres in the world. This has been one of the most complex and the best example of teamwork at Jehangir Hospital.



JEHANGIR HOSPITAL We Add Care

DIABETIC FOOT CONDITION AND ITS MANAGEMENT

- By Dr. Satish Deshmane

The current exponential rise of diabetes in India is mainly attributed to lifestyle changes. The rapid change in dietary patterns, physical inactivity, and increased body weight, especially the accumulation of abdominal fat are some of the primary reasons for increased prevalence.





Centre for Diabetic Foot Care

Foot problems are common in people with diabetes. They can happen over time when high blood sugar damages the nerves and blood vessels in the feet. The nerve damage, called diabetic neuropathy, can cause numbness, tingling, pain, or a loss of feeling in your feet. Diabetes Mellitus refers to a group of diseases that affect how your body uses blood sugar (glucose). It is a typical metabolic condition or a syndrome that affects almost every organ of the body. Due to the involvement of the foot, it presents enormous problems. Statistically, the number of hospital beds occupied by diabetic foot patients is huge.

Elderly diabetic patients are particularly burdened by a foot disease. The main causes for foot disease are peripheral neuropathy, foot deformities and Peripheral Arterial Disease (PAD). Other risk factors include poor vision, gait abnormalities, reduced mobility a medical comorbidities. Elderly people are often divorced from their feet due to several reasons like poor eyesight, etc.

Diabetics are 17 times more likely to develop gangrene of the foot than those who are non-diabetic and 40 times more likely to land up with amputations. Annually, almost 2 lakh diabetic patients have to undergo amputations in India. Sometimes amputation is necessary to prevent infection from spreading to other parts of the body.

The diabetic foot can be classified into the neuropathic foot (Diabetic neuropathy is a type of nerve damage that can occur if you have diabetes. High blood sugar (glucose) can injure nerves throughout your body. Diabetic neuropathy most often damages nerves in your legs and feet.), characterized by the neuropathic ulcer, the Charcot joint (can be defined as bone and joint changes that occur secondary to loss of sensation) and neuropathic oedema associated with good circulation, in which

neuropathy predominates, and the ischaemic foot (Ischaemic foot refers to a lack of adequate arterial blood flow from the heart to the foot.) in which atherosclerosis is the dominant factor leading to a reduction in blood flow with absent pulses.

In the neuropathic foot, blood flow is increased, the vessels are still and dilated as a result of medial wall calcification and there is evidence for arteriovenous shunting.

The neuropathic ulcer characteristically develops on the plantar surface following inflammatory autolysis and haematoma formation under neglected callosities. Chiropody is therefore the mainstay of treatment and recurrence is prevented by redistribution of weight-bearing forces by moulded insoles in special footwear. Charcot osteoarthropathy is often preceded by fracture which is a further complication of diabetic neuropathy and which precipitates the rapid bone and joint destruction of the Charcot's joint. Neuropathic oedema responds to ephedrine with a reduction in peripheral flow and an increase in urinary sodium excretion.

The ischaemic foot is characterised by rest pain, ulceration and gangrene. Medical management can be successful in up to 72%, the remainder needing

arteriography to assess suitability for arterial reconstruction or angioplasty. In the diabetic leg, atherosclerosis is predominant in the branches of the popliteal artery making arterial reconstruction difficult.

Foot infections are among the most common reasons for hospital admission of diabetic patients. A diabetic foot infection represents a failure by the patient to understand and correct the multifactorial conditions that predisposed the patient to the infection. Efforts directed towards the prevention of the foot infection are much more likely to meet with success than is the therapy of the established foot infection. This preventive approach is likely to lead to a reduction in the incidence of major amputations and thereby improve life expectancy. Understanding the pathophysiology associated with the diabetic foot is essential to the care of the diabetic patient. If a breach in skin integrity occurs, prompt assessment of vascular, neural, soft tissue, and wound status enhances the possibility of a successful clinical outcome. The complexity of the management of a diabetic requires the knowledge and skill of a multidisciplinary team, which usually includes an internist, Diabetologist, General Surgeon, Foot or Orthopaedic Surgeon, Vascular Surgeon, Plastic Surgeon Prosthetist, Dietitian, and Physiotherapist in addition to a surgeon

interested in caring for the complications of diabetic feet. The goals of this multispecialty group are to optimise local wound care, provide correct footwear, improve glucose control, educate the patient concerning diet and lifestyle changes, and identify the presence of peripheral neuropathies and reconstructable arterial lesions.

This combined medical team approach has been documented to substantially reduce the incidence of major and minor amputations in the diabetic.

The best way to protect your feet is by controlling blood sugar levels every day. This will help keep nerve and blood vessel damage from getting worse. The next step is to keep the skin of feet healthy.







Good foot care for people with diabetes includes:

Checking your feet every day: Look for cuts, redness, and other changes in the skin and toenails, including warts or other spots that your shoes could rub. Make sure to check the bottoms of your feet too.

Washing your feet every day: Use warm water and soap. Don't soak your feet because that can dry out your skin. After you dry your feet, you can use talcum powder or cornstarch between your toes. They soak up moisture that can cause infection. If you use lotion, don't apply it between your toes.

Asking your doctor how to remove corns and calluses safely: Thick skin on your feet can rub and lead to sores. But removing it the wrong way could damage your skin. So you don't want to cut the skin or use medicated pads or liquid removers.

Trimming your toenails straight across with a clipper: If it's hard for you to trim your own toenails, or if they're thick or curve into the skin, have a podiatrist (foot doctor) do it for you.

Always wear well-fitting shoes and socks or slippers to protect your feet when walking: You don't want to walk barefoot, even indoors. And be sure your shoes are smooth inside. A seam or pebble could rub your skin raw.

Protecting your feet from heat and cold: Use sunscreen on exposed skin and don't walk barefoot at the beach. In cold weather, wear warm socks instead of warming your feet near a heater or fireplace.

Keeping the blood flowing in your feet: Put your feet up when you're sitting. Wiggle your toes and circle your feet throughout the day.

Don't wear tight socks. And get plenty of activity that's not too hard on the feet, such as walking.

Getting your feet checked at your healthcare visits: Even if you haven't noticed a problem, it's good to have your healthcare provider look at your feet.

SIGNS OF DIABETIC FOOT PROBLEMS

If you have diabetes, contact your doctor if you have any of these problems:

Changes in the skin colour

Changes in the skin temperature

Swelling in the foot or ankle

Pain in the legs

Open sores on the feet that are slow to heal or are draining

Ingrown toenails or toenails infected with fungus

Corns or calluses

Dry cracks in the skin, especially around the heel

Foot odour that is unusual or won't go away

For diabetic foot, apart from the routine investigations, an Arterial Doppler study (in order to see how your blood flows through your veins and arteries, a Doppler ultrasound can be used. An arterial Doppler ultrasound may help in the diagnosis of various conditions such as blood clots, damaged or dysfunctional valves in the veins, Sonography CT angiography, X-ray for the infected foot needs to be done.

TREATING DIABETIC FOOT ULCERS

Stay off your feet to prevent pain from ulcers. This is called off-loading, and it's helpful for all forms of diabetic foot ulcers. Pressure from walking can make an infection worse and an ulcer expand.

Your doctor may recommend wearing certain items to protect your feet with:

Shoes designed for people with diabetes

Casts

Foot braces

Compression wraps

Shoe inserts to prevent corns and calluses

Doctors can remove foot ulcers with an incision and drainage of abscess debridement, the removal of dead tissues and conservative amputation may be done if needed.

Infection is a serious complication of a foot ulcer and requires immediate treatment. Not all infections are treated the same way.

The tissue surrounding the ulcer may be sent to a lab to determine which antibiotic will help. If your doctor suspects a serious infection, they may order an X-ray to look for signs of bone infection.

Infection of a foot ulcer can be prevented with:

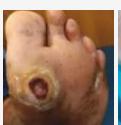
Footbaths

Disinfecting the skin around an ulcer

Keeping the ulcer dry with frequent dressing changes

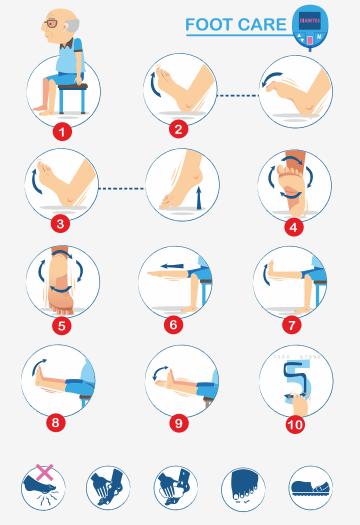
Enzyme treatments

Dressings containing calcium alginates to inhibit bacterial growth









Diabetic patients have to take care of their feet more than anyone else or any other part of their body.

Diabetic foot ulcers are a devastating component of diabetes progression affecting about 15% of patients with diabetes.

The underlying pathophysiology of diabetic foot ulcers is a complex interplay between the body's persistent hyperglycaemic state and that of neuropathic, vascular and immune system components. Preventative strategies in the form of patient education and regular foot assessments for

peripheral vascular disease and neuropathy along with risk stratification form the basis of the management of diabetic foot disease. However, a combination of a number of treatment modalities can also be facilitated by the multidisciplinary team for those with more complex diabetic foot complications.



EVENTS THAT HAPPENED

FOUNDER'S DAY



CELEBRATING



GLORIOUS YEARS OF MEDICAL EXCELLENCE

Jehangir Hospital, along with its family of 1,500 employees celebrated the hospital's 77th Founder's Day on 5th February 2022. It was a day to reminisce its journey, which began in 1946. The hospital has come a long way since then, by taking giant strides to bring care and hope to not just the people in Pune, but also to those in need beyond our shores.

On this special occasion, the hospital celebrated them and recognised those who went beyond the call of duty through sheer passion and compassion to contribute towards the welfare of patients in the past one year. Here are a few awards that were presented on this auspicious day:

- · Honesty Awards
- Attendance Awards
- · Long Service Award

The occasion was graced by Mr. Jehangir H C Jehangir, Chairman and Trustee, Jehangir Hospital, members of the board and CEO, Mr. Vinod Sawantwadkar, who spoke about Jehangir Hospital's transformative journey over the past one year. Jehangir Hospital has seen many milestones, set new benchmarks and pioneered into uncharted territories. We are amongst the region's most trusted and influential integrated healthcare providers. Accolades and awards bestowed upon us during last one year is the testimony to that.

The Founder's Day celebration also provided an opportunity for Jehangir Hospital doctors and staff to display their talents through a cultural programme that was showcased on this occasion.

GLIMPSES OF THE CELEBRATION



Dr. Parimal Lavate - Sr. Consultant & Director, Gastro Sciences, JH and Mr. Jehangir, H.C. Jehangir, Chairman, JH











Hands that heal, hearts that care for health that matters

































































CHRISTMAS CELEBRATION

The Christmas celebrations at Jehangir Hospital began on a high note as the entire team celebrated the festive season with tremendous zeal and fervour. Here's a snapshot of the celebration that happened in our hospital.



IPW TRAINING

Training activity by Team Leaders on IPW This event took place around the hospital to show that we can protect our health by reducing infection.









Honoring Commitment and Contribution of Consultants

JEHANGIR HOSPITAL - REWARDS & RECOGNITION

On the occasion of our 77th Founder's Day celebration, Jehangir Hospital recognised some of its champions for their contribution to various aspects of healthcare in the following categories:























100% Appointment Adherence 2021

Dr. Nilesh Bhandari

Department of Neuro Science, Jehangir Hospital

Dr. Sriniwas Ambike

Department of Nephrology and Transplant Programme, Jehangir Hospital

Most Consistent in Academic Activities 2021

Department of Obstetrics & Gynaecology - Award received by Dr. Jyothi Unni

Director, Department of Obstetrics & Gynaecology, Jehangir Hospital

Department of Anaesthesia Award received by Dr. Sandya Sathe

Consultant Anaesthetist, Jehangir Hospital

Academic Driving New Initiatives and Development 2021

Department of Transfusion Medicine

Head, Department of Transfusion Medicine and Blood Bank

Most Number of Publications in the Year 2021 -

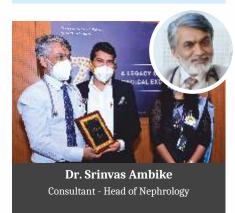
Academic Achievement of the Year

Department of Pathology - Award received by Dr. (Col.) S. S. Gill

Medical Director and Head Department of Pathology, Jehangir Hospital

Dr. Snita Sinukumar

Consultant Surgeon - Department of Onco Sciences, Jehangir Hospital

















TESTIMONIALS

I will prescribe a medicine for her that will enable her to walk

I, Mohammed Ali Al Badri, the Vice President of Supreme Court in the Republic of Yemen, have the honour to submit herewith my sworn declaration that I accompanied my wife, Safia Mohammed Qadri, from Yemen to India as a patient after 2 years of suffering, motionless in her room, who couldn't walk more than 10 meters. l presented her to all specialists available in Sanaa, Yemen but in vain. So, we came to Pune. And due to her good luck, I brought her to hounarable Dr. Sandeep Borse at Jehangir Hospital, in view of advice given by one surgeon in Pune to do nails in her lower spine. When she was examined by Dr. Sandeep, he refused that view and said, "There's no need of surgery.

again." I was astonished. I couldn't believe what I heard. Just after 4 days of using that medicine, she felt that her body started to loosen up, and with a help of physiotherapy exercises, she was able to walk independently for long distances gradually. However, I hereby express the gratitude of my entire family for Dr. Sandeep Borse, the statue and pillar of medicine in Pune, who deserves all thanks for his efforts in relieving human suffering. Alongside him, there are others who also deserve the same gratitude. This is a real witness under my oath, and according to the best of my belief.

> - Mohammed Ali Al Badri - Republic of Yemen

We took treatment under **Dr. Mangesh Mekha** for kidney cancer. He is
extremely down-to-earth and polite
throughout my father-in-law's
treatment. He never disappointed us

even when we reached out to him multiple times in fear & tears. He helped us in every possible way. It's very bad that we lost our dad, but still, I can say he is a fabulous doctor.

- Ms. Amrita Dash

I have been taking treatment for cancer at Jehangir Hospital, Pune, since 2nd July, 2020 under the supervision of **Dr. Mangesh Mekha** who is very nice, gentle, intelligent and has a great vision. My chemotherapist are going on ever since I started my treatment. The nursing staff posted at Day Care, Jehangir Hospital, Pune, has been very polite and well-behaved. We are proud of such doctors who are working in the present condition with a Great Spirit and dedication.

- Mr. Vikram Mahajan

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With a purpose to recognise and promote excellence in nursing practice, research, education and career development, we, at Jehangir Hospital, help nurses so that they make optimal contribution to the patients and their work environments. This will eventually result into the recognition of their efforts.

WHAT IS NABH - NURSING EXCELLENCE?



Exclusive accreditation of nursing service by NABH

NABH Nursing Excellence contains complete set of standards for evaluation of nursing service for grant of certification

These standards provide framework for quality of care for patients and quality improvement for nursing services

It also serves as guidelines to nurse administrators and supervisors for supporting and facilitating safe, competent and ethical nursing practice

PURPOSE

Practice Research Education Career Development

BENEFITS OF THE CLIENTS

Good health outcomes	
Client satisfaction	
Value for money	
Less frustration	
No medical errors	

BENEFITS OF THE HEALTH INSTITUTION

Patients are more satisfied with the services

More patients tend to use our services

The environment becomes clean and beautiful

The facility earns a good reputation

This certification programme stimulates continuous improvement

It enables hospital in demonstrating commitment to quality care

BENEFITS FOR NURSING STAFF

Focus on professional autonomy

Enhanced interdisciplinary collaboration

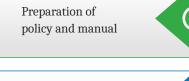
Professional growth opportunities

Leadership opportunities

Opportunity to practice professional nursing with strong interdisciplinary teamwork that supports autonomous practice of nursing

A culture that supports you to be the best nurse you can be

NURSING EXCELLENCE CERTIFICATION PROCEDURE



Application for certification



Notification of Principal Assessor and Assessment Team



Types of Assessment conducted by NABH



Virtual Assessment





JOURNEY OF NABH NURSING EXCELLENCE-2021

The journey of NABH, i.e., from applying to grant of accreditation/certification involves the awareness & training of all the members of the healthcare organization about the various chapters, standards & objective elements of the NABH booklet. The staff has imbibed the culture of NABH by getting trained in the standards, understanding the applicable standards in the right way so that the same can be implemented, measured and monitored in the right manner by the organisation.

As the increasing no of COVID cases, the auditing has been planned virtually by the assessors. The Virtual Audit was conducted on 19th December, 2021 from 8.30 AM till 3.30 PM. The Primary Assessor for the excellence was Josephine Cyrill and the Secondary Assessor was Clara D'mello. The report of the assessment was sent by the auditors. The assessment report was reviewed by the team and planned for the necessary corrective action.









TREATING BRAIN TUMOUR

Dr. Prashant Khandelwal is a neurosurgeon, performing surgeries on the problems of the brain and nerves. After taking his basic education from a reputed college in India, he went to Germany and Japan for higher education. There he completed Fellowships in Minimal Invasive Neurosurgery, Endoscopic Endonasal Surgery, Endoscopic Assisted Micro Neurosurgery, Skull Base Surgery, Vascular Neurosurgery and Stereotactic Radiosurgery.

Dr. Khandelwal is known for complex brain and spine surgeries. He has extensive experience of 20 years in the field of neurosurgery and has worked with renowned neurosurgeons in the world. He is attached to various hospitals in Pune as

WHAT ARE THE REASONS BEHIND BRAIN TUMOUR FORMATION?

The concrete reasons for brain tumour formation are not always known. Some factors which cause the brain tumour are as follows.

- · Radiation (X-Ray) · Virus
- · Some chemicals
- · Most brain tumours are not hereditary
- The discussions and research on whether excessive use of mobile causes brain tumour are currently underway



an Honorary Consultant and is a Teaching Faculty in Bharati Vidyapeeth Medical College. Here's what Dr. Khandelwal had to say about the Brain Tumour.



HOW IS A BRAIN TUMOUR DIAGNOSED?

Medical history and physical check-up of the patient give an idea. According to that, further medical tests are suggested. CT SCAN/ MRI SCAN test gives clarity on the shape, type, location and complexity of the tumour. Depending upon it, surgical planning is done.

WHAT ARE THE SYMPTOMS OF A BRAIN TUMOUR?

The symptoms of the lumps depend on the type and location of the brain tumour. Some of the common symptoms of a brain tumour are as follows.

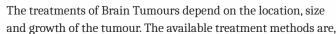
- Headache or severe headache especially in the morning
- Vomiting
- Blurred vision, weakened eyesight and unclear vision
- · Weakness in hands and feet
- · Stuttering while speaking
- · Memory loss
- ${\boldsymbol{\cdot}}$ Change in behaviour

WHAT IS A BRAIN TUMOUR? WHY ARE PEOPLE SCARED OF BRAIN SURGERY?

A Brain Tumour is a lump formed in the brain. The lumps which are formed inside the brain are called Primary Brain Tumours. The lumps which are spread to the brain from the cancer of another body part, are called Secondary Metastatic Brain Tumour.

The human brain is an important and complex organ. All the body functions are controlled by the brain. Any harm to the brain can affect and cause the disease in the entire body.

WHAT ARE THE TREATMENTS OF A BRAIN TUMOUR?





WHAT ARE THE PROCEDURES OF BRAIN TUMOUR SURGERY?

The brain surgery is planned according to the location, type and complexity of the tumour. A craniotomy is performed for the surface tumour. A part/piece of the skull is cut or removed to reach the tumour.

In Microscopic Excision of the Tumour, the Microscope is used to minimise the damage to the brain cells.

The tumour is the brain sac that is removed with the help of the Neuroendoscope. During this process, a small hole is made in the skull and the tumour is removed with the help of a microscope.

The skull bone tumour is be removed microscopically or endoscopically.

In Endoscopic Tumour Excision, the microscope is inserted through the nose to remove the tumour. This is called Endonasal Skull Base Surgery.

today. These Minimal Invasive Technologies ensure minimum damage to the brain.

This results in a low disease and death rate and the patient outcome is better.

To reach precisely a deep-seated tumour, a stereotactic frame with CT/MRI Guidance is used or Sonography is done during the surgery.

Neuro Navigation Surgery - This advanced equipment displays information on a TV monitor in real-time, about the distance of the tumour, its direction and remaining mass and how away it is from the major parts of the brain.

Robotic Neurosurgery - This procedure is used for specific surgeries. An expert neurosurgeon is required to perform this surgery. For the tumours in parts of the brain, which can't be touched, Radiosurgery of Gamma Knife Surgery are a safe option.



WHAT IS YOUR PERSPECTIVE ON THE PROGRESS IN NEUROSURGERY DURING THIS CENTURY?

During the last fifty years, the field of neurosurgery has made rapid progress, thanks to various tests, equipment, advancement in surgical techniques and surgeries through microscope or endoscope. Many inoperable brain tumours can be surgically treated



BREAST HEALTH

INTERNATIONAL SCHOOL OF



ACADEMICS & CERTIFICATIONS

DEPARTMENT OF ACADEMICS

National Board of Examinations in Medical Sciences (NBEMS) is an autonomous body under the Ministry of Health and Family Welfare, Govt. of India, New Delhi. Jehangir Hospital has been accredited with NBEMS since 2005 for the post-graduation courses in medical education. To date, the hospital is recognised for imparting PG training leading to DNB degree of NBEMS in various courses. DNB is equivalent to M.D, M.S. degree in India.

Presently, the following DNB courses are run by the hospital:

Anaesthesia	General Surgery			
Cardiology	Obstetrics & Gynaecology			
Emergency Medicine	Orthopaedics			
Family Medicine	Pathology			
General Medicine	Radiology Paediatrics			

Honarary Associate
Professorship at
University of East
Anglia, U.K.

Having trained over 500
aspiring oncoplastic
surgeons from numerous
countries, I feel
honoured to receive this
esteemed recognition.

Dr. C.B. Koppiker
Breast Cancer, Breast Oncoplastic & Reconstruction Surgeon, JH

Recently, Critical Care Medicine accreditation in super specialty has been granted by NBEMS. The new accreditation process on Surgical Oncology is in progress. Presently, 54 trainees are undergoing training under the guidance of experienced consultants. As a result of good clinical exposure to trainees, their hands-on training skills have been of a good standard. Thus candidates during

counselling of new admissions always have given preference to Jehangir Hospital in the first round. Infrastructure facilities such as a good library, online access to e-journals, e-books, etc. up-to-date online databases are available. Thesis work monitoring and logbook checking are done periodically to ensure the quality of training. Monthly clinical meetings, ACKN Apollo training programme,

webinar of NBEMS. Annual reviews, FAT exams, etc. are arranged on regular basis. Students attend Virtual Tumor Board meetings conducted by National Cancer Grid. It is an honour for Jehangir Hospital that NBEMS has approved the Dept. of Obstetrics & Gynecology and Family Medicine for conducting Final Practical exams of DNB courses.

I am extremely honored to be appointed as the "Honorary Associate Professor" at the University of East Anglia (UEA), United Kingdom (UK). More than any other award or honor this recognition feels very important because I am a teacher at heart. Education is our passport to the future.

I have trained over 500 surgeons until now. In my quest to build a better infrastructure for budding and promising oncoplastic breast surgeons, the University of East Anglia and Prof. Jerome Periera became my aide-de-camp.

In a collaborative effort in 2017, we started our MCh program in Breast Oncoplasty. Three batches have since been trained with young physicians from India, Indonesia, Nepal, Maldives, Bangladesh, Sri Lanka, Malaysia, etc., gaining hands-on experience in Oncoplastic techniques and has brought a formal training program to the Indian subcontinent.

Through this prestigious role as an Honorary Associate Professor, I become an integral part of the capacity-building initiatives at UEA, UK, and help this program grow further. This role entitles that I periodically visit UEA, UK as an expert at the Oncoplasty training programs and conduct workshops and train aspiring surgeons in various oncoplastic procedures. I look forward to sharing my expertise and in my role as an Associate Professor contributing to the excellent work ongoing at UEA, UK. Through this honor, my belief in capacity building grows stronger as together we continue to train the next generation of oncoplastic breast surgeons and be the change we want.

This honor wonderfully coincides with 25 years anniversary celebration of PCCM. As I express this gratitude, we must never forget that the highest appreciation is not by just words, but to live by them.

ISOS is planning the next Hands-on training workshop in the 1st quarter of 2022. Stay tuned, for more information visit: https://www.breastoncoplasty.org/

#ISOS #Breastonciplastyprogram #UniversityofEastAnglia #handsontraning #orchidbreasthealth #prashanticancercare #breastcancer #capacitybuilding



Highlights:

Our result has been always more than 90%

MUHS Nashik University has recognised Jehangir Hospital for Fellowship courses

Recognition of Minimal Access Surgery and Fellowship course in Basic Endoscopy in Gastroenterology Fellowship course has been granted recently

Jehangir Hospital, Pune, has achieved the status of teaching hospital

for imparting PG teaching in Broad and Super specialties due to its mission

of management to achieve excellence in medical education and serving

the community at large.

Jehangir hospital has also run the IDCCM course (Indian Diploma in Critical Care Medicine) for years. It is a one-year course post-MD/DNB Medicine/ Anaesthesia/Pulmonology/Emergency Medicine.

An orthopaedic dept. student in the past has won a gold medal in NBEMS and another trainee has published two papers in Index journals

Few of our students are renowned faculty at various hospitals in India

DNB faculty attend annual conferences, seminars, workshops in respective specialties



JEHANGIR HOSPITAL We Add Care

JSH SUCCESS STORY

JEHANGIR SPECIALITY HOSPITAL CONDUCTS COMPLEX PRIMARY TOTAL HIP REPLACEMENT IN FUSED HIP - A VERY RARE CASE!



DR. ASHISH ARBAT
MS, MCh, FRCS Orth UK
Jehangir Specialty Hospital,
Kothrud, Pune

A 21-year-old patient with a history of a two-year-old head injury suffered post-injury avascular necrosis of the hip due to head injury. Avascular necrosis is the death of bone tissue due to a lack of blood supply. Also called osteonecrosis, it can lead to tiny breaks in the bone and the bone's eventual collapse.

The patient came to Jehangir Speciality Hospital Kothrud for Total Hip Replacement in Fused Hip - The surgery was refused by many hospitals due to its complex nature.



So, anaesthesia was one of the main concerns in planning and the issue of all the muscles that were fused was also of chief concern. The patient was given spinal and epidural anaesthesia which took some time because even the spine was deformed. Pertaining to this, the plan for Roboalign, CT-based planning was done for Patient-Specific Implantation. Due to lack of muscle balance, a special implant with a Special Pinnacle Cup, with constrained liner was ordered from the US to prevent dislocation. The resultant to the lack of muscles lead to extra bony cuts apart from

the regular Total Hip Replacement. Systematically, we started an incision of the hip from a posterior approach. Then with extra caution, we released the soft tissues while protecting the maximum muscles possible slowly but surely doing all the extra releases from the femur with caution. The femoral head area was demarcated and the pinnacle cup was placed first. This task took more than three and a half hours. Extreme care was taken to prevent any damage to the femur and the soft tissues around.

There were several challenges in this case:

- · Young boy with fused hip
- Both the hips were fused with exuberant Bone Callus: (callus, also spelled callous, in osteology, bony and cartilaginous material forming a connecting bridge across a bone fracture during repair). Within one to two weeks after injury, provisional callus forms, enveloping the fracture site. A surgical fusion of joint surfaces, commonly in the knee, spine or hip. The process may include inserting surgical pins, plates and screws for permanent support. The goal of arthrodesis is to restore, strengthen and stabilise a weak hip joint. However, doctors rarely do the procedure now.
- Callus formation in the peri-hip muscular area. Biologically, calluses are formed by the accumulation of terminally differentiated keratinocytes in the outermost layer of skin.
- There was no anatomical landmark to find out the centre of the hip during surgery
- · There was no movement of the spine for anaesthesia



Corail stem placed with an S Rom constrained liner and this is the final Xray.It was a very challenging case and reported one in a lakh cases.



This is the most challenging case apart from a lot of complex cases that we did in JSH Kothrud.





Exuberant callus removed is shown





Result: Patient is walking from the 2^{nd} day of surgery after 4 years

NOTE FROM THE MEDICAL DIRECTOR

Greetings!

It has been an eventful journey with Jehangir Hospital as we enter the 77th year of its inception. Jehangir Hospital has always been synonymous with medical excellence and affordable yet world-class healthcare. The NABL & NABH accredited hospital has always been the torchbearer of the highest quality care and our accomplishments have spoken louder than our actions.

NABL accreditation of the Jehangir Hospital Laboratory aligns the hospital with the sole accreditation body authorized by the Government and the laboratory practices with laboratory accreditation practices throughout the Asia Pacific region as well as internationally. The accreditation process is a third-party audit of all aspects of laboratory practices in compliance with ISO 15189:2012 and NABL 112 standards.





The NABH has a history of its own when it comes to delivering nursing excellence. With a purpose to recognise and promote excellence in nursing practice, research, education and career development, we help nurses so that they make an optimal contribution to the patients and their work environments. This will eventually result in the recognition of their efforts.

NABH Nursing Excellence contains a complete set of standards for evaluation of nursing service for grant of certification. These standards provide a framework for quality of care for patients and quality improvement for nursing services. It also serves as guidelines to nurse administrators and supervisors for supporting and facilitating safe, competent and ethical nursing practice. Jehangir Hospital has received exclusive accreditation of nursing service by NABH and we are proud to showcase that as one of our most prestigious recognitions.

Speaking of moulding the best healthcare providers, Jehangir Hospital is also a toprated learning centre in Maharashtra for providing a DNB programme for PG students. It is one of the only two institutes

in Pune which provide DNB in Emergency Medicine. Other than that, we also offer the DNB programme in many branches.

The Department of Academics at Jehangir Hospital works on incubating, training and skilling new talent. It is our way of giving back to the community and helping our skilled pool of talent share their expertise with new medical professionals.



Some of the post-graduate courses conducted in the DNB programme include General Medicine, General Surgery, Obstetrics & Gynaecology, Family Medicine, Cardiology, Orthopaedics, Pathology, Paediatrics, Anaesthesia, Radio-Diagnosis, Emergency Medicine and Critical Care Medicine.

The hospital also offers a Fellowship course of MUHS (post-MD & MS) in areas such as Minimal Access Surgery and endoscopy and Breast Surgery. The stateof-the-art infrastructure at the academics department is well-equipped with OPD, IPD facilities for clinical training, handson training facilities in OT, emergency, wards & supportive services. The department also houses a 24x7 library with the latest textbooks and e-library journals & books and the students can make use of the audio-visual aids. A series of various teleconferencing, CME / Workshop events are held on a regular basis with a periodical appraisal of DNB

The hospital has achieved plenty of milestones with this programme such as the passing ratio of DNB trainees has always been more than 85 % each year. The hospital has been rated as the excellent training Centre by Apollo Group of Hospitals, and the ongoing DNB trainee's feedback has been excellent due to good clinical exposure and training by experienced faculty. When it comes to delivering the best care, Jehangir Hospital is known for its "Dedication to Deliver" and that's where our newest Mother & Child" care unit comes into the picture.

The best part of this unit is that it's equipped with a dedicated PICU & NICU,

one of the most advanced state-of-the-art equipment and infrastructure, backed by a team of specialized lactation and paediatric nurses.

Our clinical excellence in delivering the best care in 'Mother & Child' is also reflected in the number of deliveries done by our team of expert gynaecologists. The specialized lactation & paediatric nurses ensure that the mother & child are looked after with utmost care right from the moment the mother steps in and the mother & child step out of the hospital with a smile on their faces. Such was the case when a 4-year-old boy battled an adult-like COVID.

The bubbly four-year-old (Prem) overcame severe COVID-linked pneumonia with Acute Respiratory Distress Syndrome (ARDS) that had kept him strapped to an invasive ventilator for 45 days.

The doctors at Jehangir Hospital said Prem's recovery following such a long period of mechanical ventilation was in all probability the first such case in the world.

Prem was discharged following complete lung recovery after 67 days. This included 45 days on an invasive high-frequency ventilator - an advanced version of mechanical ventilation.

A patient with blood oxygen saturation going below 93% requires oxygen therapy and the extremely low levels in Prem's case necessitated aggressive treatment with invasive ventilator support. The family started searching for a paediatric ventilator bed at different found one at Jehangir hospital.

Dr. Sagar Lad, Prem's treating doctor and Jehangir Hospital's paediatric intensivist, mentioned that Prem landed in Jehangir Hospital with extreme COVID-pneumonia. His High-Resolution Chest Tomography (HRCT) score was 21, showing adult-like acute COVID-pneumonia severity rarely seen in children. He was immediately put on invasive ventilator support but there was not much improvement. Hence, a special type of ventilator, called a high-frequency invasive ventilator, was used to treat complications of COVID-pneumonia termed as ARDS.

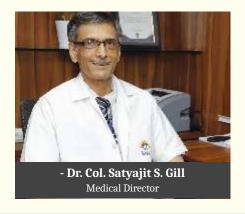
Prem was treated by a team of expert doctors including the Infectious Diseases

expert, Dr. Piyush Choudhari, and Senior Paediatrician, Dr. Sanjay Bafna. Prem's condition started improving and the doctors started weaning him off mechanical ventilation after 45 days of life support.

To ensure that we deliver world-class healthcare that meets global standards, Jehangir Hospital recently introduced a 4D echocardiogram. For the uninitiated, an echocardiogram is an advanced ultrasound test that creates images of the heart. Instead of using 3D technology, the 4D system creates a live video effect. This can also be used for fetal echocardiography as it gives real-time images and videos, it will provide the doctor with an accurate evaluation of the heart. It will be easier to see its function and structure with this innovative technology. Even the condition of the heart chamber and valves can be seen using this test.

The reason why this technology was introduced in our hospital was quite clear. While we speak of transforming the healthcare landscape with the help of digital and technological assistance, the 4D echocardiogram is a worthy inclusion. It can identify changes in the heart and is developed for three major imaging methods: Doppler imaging, which is a $method \ used \ to \ image \ the \ tissues. \ The \ next$ method that is used is speckle tracking which is an alternative for Tissue Doppler. The specialty of this method is it used motion analysis while the rest uses static imaging. The third method uses 3D block matching to assess 2D grayscale images while delivering motion estimates. This technology truly sets a benchmark in providing quality healthcare to all.

When we continue to provide such a high level of care even to the little ones, we consider ourselves to be fortunate and capable enough to be able to deliver that selflessly. After all, Jehangir Hospital stands true to its ethos of - hands that heal, hearts that care for health that matters, come what may!



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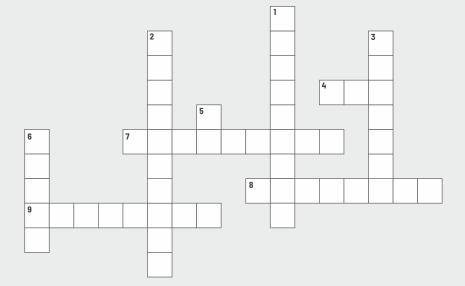
CROSSWORD

DOWN

- 1. Type of diabetic foot that lacks adequate blood flow (9)
- 2. A foot doctor (10)
- 3. Alternate term for Neuropathic arthropathy ($_$ Joint)(7)
- $5. \ \ Commonly\,used\,term\,for\,blood\,sugar\,test\,done\,after\,the\,food\,intake\,(2)$
- 6. One of the items used to protect the feet from ulcers (5)

ACROSS

- 4. This acronym is for a test that detects the antibodies targeting insulin (3)
- 7. The name of the Jehangir Hospital clinic dedicated for diabetic foot care (5,4)
- 8. Commonly known as high blood sugar (8)
- 9. Good foot care includes trimming your $_$ with a clipper (8)



SUDOKU

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	5						9	
		3	5	8			6	

CELEBRATE THE GIFT of a new life!





This special festival marks the beginning of a new year for the Parsi community and the New Year ushers in new milestones to accomplish, new relationships to build and new lives to heal.

As we enter our 77th year, we continue to keep

Patient First

and deliver world-class healthcare with diverse and advanced services.

On this festive occasion, We, at Jehangir Hospital, wish all Parsis a joyous and fulfilling Navroz.

NAVROZ MUBARAK