



**Hiranandani
Hospital**

Your Family Superspecialty Hospital™

Dr L H Hiranandani Hospital

**BUILT WITH
CONVICTION**

**DRIVEN BY
OUTCOMES**

**ADVANCING WITH
YOUR TRUST**



TIMES HEALTH SURVEY

ALL INDIA MULTI SPECIALITY HOSPITALS RANKING SURVEY 2021

3rd

**Top Multi
Speciality Hospital -
Mumbai City**

3rd

**Top Multi
Speciality Hospital -
Western Zone**

14th

**Top Multi
Speciality Hospital -
National**





Dr. Anita Soni
MD, DNB, FCPS, DGO.
Full Time Consultant - Obstetrics & Gynaecology

HIGH RISK PREGNANCY

A High Risk Pregnancy (HRP) is a condition during pregnancy that threatens the health and life of the mother and/or the unborn foetus that needs special care, follow up and management.

There is increased incidence of HRP due to Obesity, PCOS, Advanced maternal age, Infertility/Artificial Reproductive Techniques, Medical disorders and Multiple pregnancy.

The High Risk Pregnancy Clinic aims to provide education, surveillance and management of pregnancies at risk. A Multidisciplinary Team (MDT) approach is followed involving the Consultant Obstetrician, HRP Clinic Coordinator, Pediatrics,

Neonatologist, Radiologist, Fetal Medicine Consultant and other specialists like Physician, Endocrinologist, Cardiologist, Hematologist, Nephrologist, Rheumatologist, Gastro-enterologist etc. according to the individual case scenario. It involves all specialists under one roof consulting as a team.

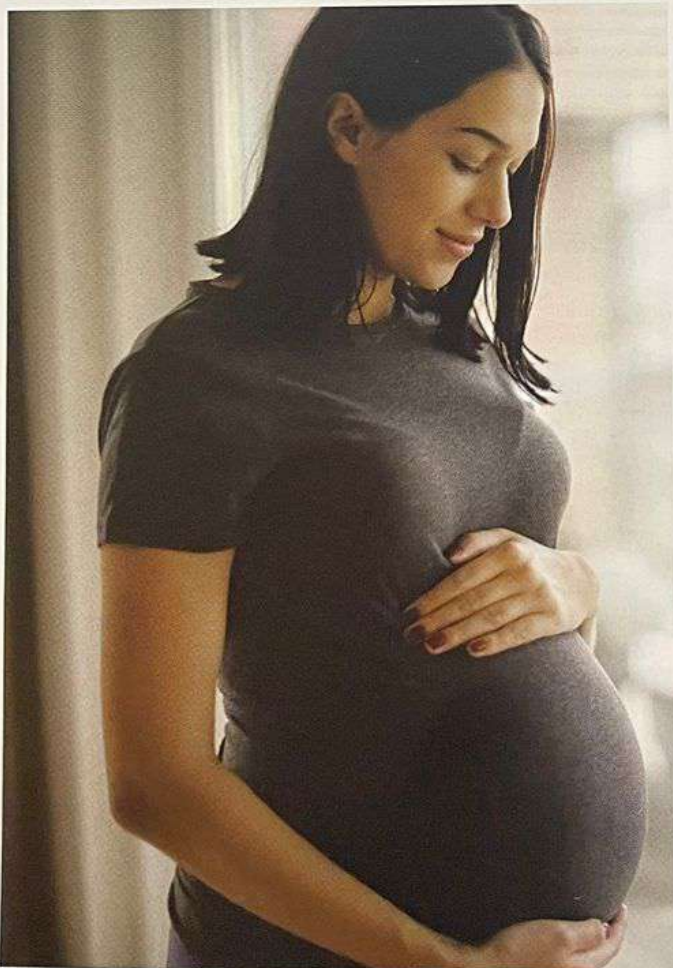
The multidisciplinary team approach has emerged as a way of providing comprehensive medical care by bringing together professionals from a wide range of disciplines in a coordinated and effective manner to improve maternal and neonatal outcomes.

High Risk Pregnancy Clinic Services include Genetic counselling, Pre-conceptional counselling, Prenatal screening and diagnosis with facilities which include biochemical marker screening like double marker, enhanced first trimester screening, quadruple marker test, NIPT; advanced ultrasound for the detection of fetal anomalies like NT scan and a detailed malformation scan, fetal 2D Echo whenever required; advanced procedures like chorionic villous sampling, selective fetal reduction, amniocentesis, fetal blood sampling, intrauterine transfusion in cases of Rh isoimmunisation, fetal therapy; other special investigations like karyotype and microarray for products of conception etc.,

Regular follow up with obstetrician in OPD, Extensive antepartum and intra-partum fetal surveillance, State of the art LDRP suites with hydrotherapy, Labour Room and well equipped Operation Theatre, Labour analgesia by the anaesthetists, Blood bank facility in case of obstetric emergencies and NICU with advanced neonatal care managed by neonatologist.

To improve our maternal and fetal outcomes in High Risk Pregnancy Clinic we follow Protocols with use of tools like Diet charts/ hand-outs for patients and best practice evidence based protocols. We improve outcomes by following Standard Operating procedures, Clinical Pathway, Multidisciplinary Team approach, Training the students and staff adequately, Safety checklist, Complete documentation, Ensure continuity of care after discharge, Simulation programs, Continuing Medical Education (CMEs) and Clinical Audit.

We have many success stories till date and wish to continue the good work and aim to optimize our maternal and fetal outcomes!





Dr. Vanita Raut

MD, DGO.

Full Time Consultant - Obstetrics & Gynaecology

VAGINAL SURGERY: SCARLESS SURGERY

At the midlife, a woman may suffer from a number of gynecological problems like prolapse, fibroid uterus, adenomyosis and abnormal uterine bleeding. These problems if not controlled by medicines, may require hysterectomy i.e. removal of uterus.

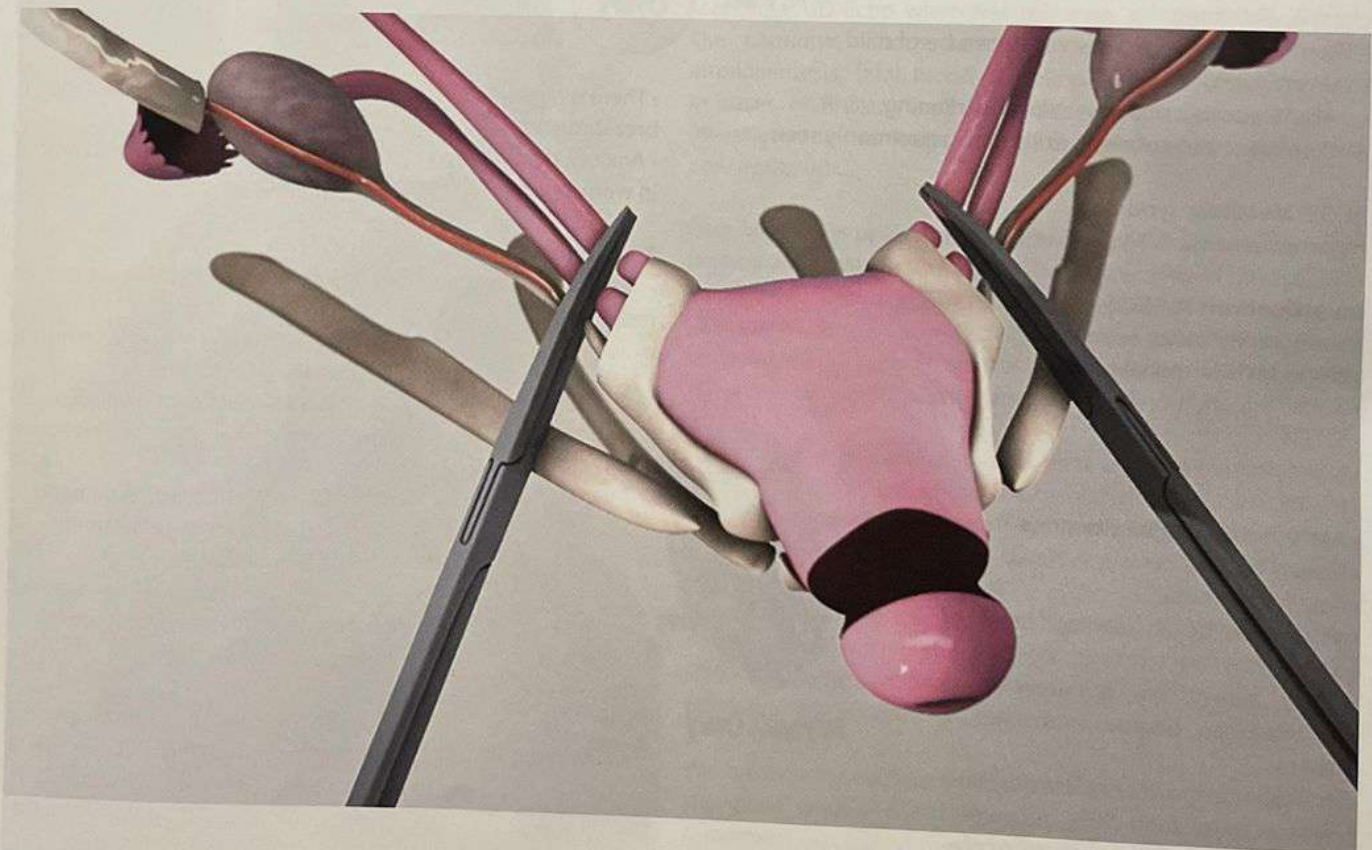
An important question in hysterectomy is the route by which uterus can be removed. Depending upon the clinical situation and the experience of the surgeon, it can be removed by vaginal, abdominal or laparoscopic routes.

While deciding the route of hysterectomy, following points are considered. It should be minimally invasive, safe and with minimal complications. It should have pain free and comfortable post-surgery period. Hospital stay should be short,

and the recovery should be fast and the woman should be able to get back to her routine as early as possible. As all these criteria are fulfilled by vaginal hysterectomy, so it is the best route for removal of uterus.

An experienced surgeon can remove the uterus vaginally even if there is no descent, or even if the uterus is large in size or even if woman has undergone previous surgeries. Some of the ovarian and tubal pathologies can also be managed vaginally. As there are no stitches outside, so in a true sense vaginal hysterectomy is a scar less surgery.

With the advent of laparoscopic surgery, fewer vaginal surgeries are performed now a days. Laparoscopy has originated from western world and it does have a place in certain cases. The world famous gynecologists who performed vaginal surgeries are from India. So we should keep the legacy of vaginal surgery and let it not be a disappearing art.



Dr. Rakhee Sahu

MD, DGO, FCPS,
Dip. In Gynaecology, Endoscopic Surgery.
Full Time Consultant - Obstetrics & Gynaecology



PCOS - POLYCYSTIC OVARIAN SYNDROME

PCOS is a common endocrine disorder among women of reproductive age group. PCOS is diagnosed in about 10-15 % of female population. PCOS has been given a new nomenclature as a Metabolic & Hormonal / Endocrine / Reproductive disorder

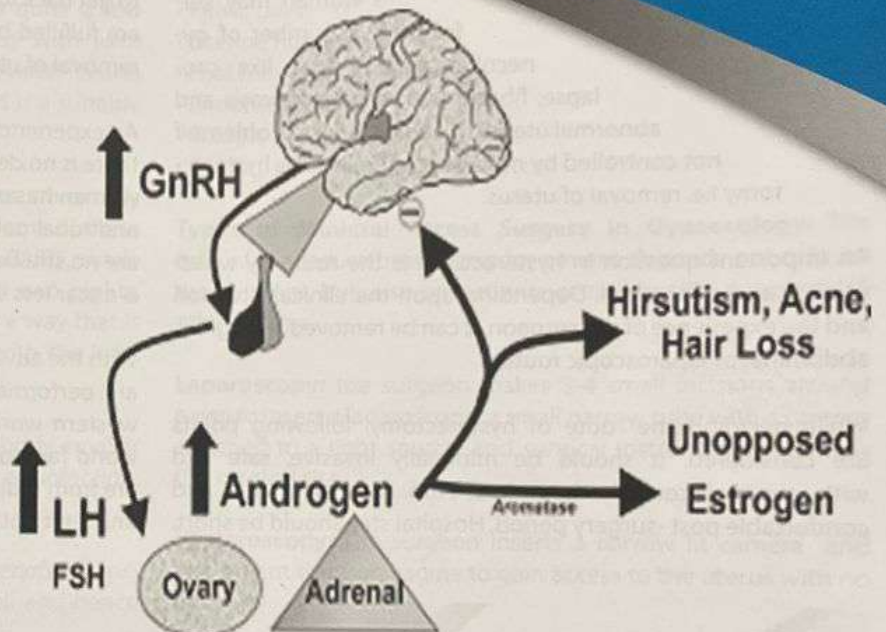
- PCOS can present early in Adolescent group or later in age group of 25 to 35 years.
- The Ovaries are enlarged with multiple small cyst (due to anovulation)
- PCOS can present with a wide spectrum of complains like menstrual irregularities like infrequent, scanty menses or prolonged bleeding pattern.
- Usually women have obesity(80%) but some can be lean (20%)
- Girls can have Hirsutism i.e. excessive male pattern hair growth like upper lip, chin, midline chest & abdomen.
- Women suffer from Acne which can be of mild to severe form.
- Acanthosis nigrans- skin darkening & thickening at nape of neck, axilla is also commonly seen

PCOS- Metabolic syndrome

Hyperinsulinemia & Hyper Androgenism

Investigations in PCOS-

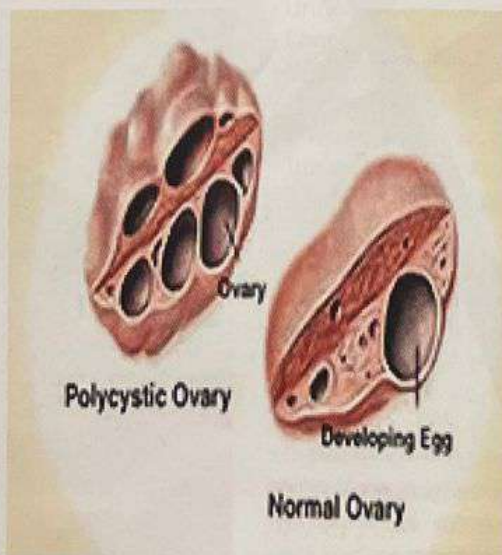
- Sonography pelvis – s/o PCOS
- Blood test-Hormonal profile
- S. FSH & S. LH
- S. TSH
- S. prolactin
- HbA1c
- AMH- Anti Mullerian Hormone
- Lipid profile
- Free Testosterone
- PCOS can be a leading cause of infertility
- They are at risk for developing cardiovascular disease and type 2 diabetes
- The National Institutes of Health (NIH) estimate more than 50% of women with PCOS can become diabetic or pre-diabetic before age 40.



- There is higher risk for endometrial cancer and ovarian cancer/ breast cancer.
- Anxiety, depression and Low self- confidence is more common in women with PCOS than other women.

Treatment of PCOS

- Treatment depends, mainly on patient age, symptoms & fertility issues



- Lifestyle changes- weight control, Exercise, Dietary changes
- Hormonal Supplements like OC pills, progesterone to control bleeding patterns
- Anti- Diabetic drugs if pre-diabetic
- Anti-androgenic drugs- for treatment of Acne & Hirsutism
- Cosmetic treatment like waxing, creams, laser therapy for facial hair reduction

There should be a multidisciplinary approach for treating PCOC women comprising of a Gynaecologist, Endocrinologist, Dietician, Dermatocosmetologist and Psychologist

Dr. Chitwan Dubey
MBBS. M.S.
Full Time Consultant – Obstetrics and Gynaecology.

MINIMAL ACCESS SURGERY



Minimally invasive surgery is a viable option for women with a variety of gynecological conditions, and it offers quite a few benefits over traditional surgery. We work closely with each patient to evaluate her individual symptoms, overall health, and other factors, to determine whether a patient is a suitable candidate for minimally invasive surgery or not.

Popularly called as "KEY HOLE SURGERY", it requires no or only a few small incisions, rather than a large incision. Some of these procedures can even be done on OUTPATIENT BASIS, while others may require a short hospital stay of one or two nights. Our goal is to manage each patient's problems in a way that is unique to them & achieve an excellent outcome with 'the least possible impact and disruption to their lives'.

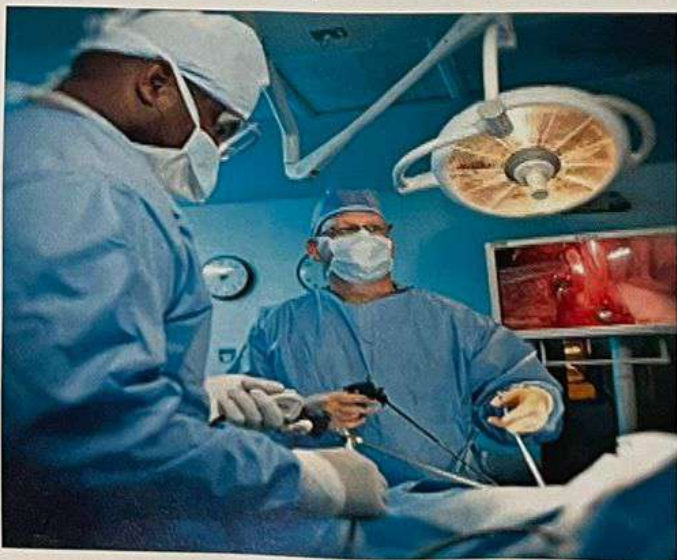
What Are the Physical Benefits: Less stress on the body, smaller incisions, less pain, quicker recovery, less risk of infection, reduced scar tissue, early discharge to name a few.

What are the Psychological Benefits: Physical benefits translate to psychological effect on the patient as well and hence 'better health'.

Patients love to be able to have the surgery in the morning and quick restoration of eating drinking, bladder and bowel control without any dependence, getting back to their routine life. So overall it is less daunting for the patient and less burdensome on them and their loved ones.

What are the conditions we treat with minimal access surgery

- Heavy bleeding and painful periods



- Ovarian cysts
- Pelvic pain
- Uterine fibroids
- Post menopausal bleeding
- Endometriosis
- Ectopic pregnancy
- Fertility enhancing surgeries etc

Types of Minimal Access Surgery in Gynaecology: The type of procedure best suited for patient depends not only on the ailment, but, also on patients overall health, symptoms & other factors.

Laparoscopy: the surgeon makes 3-4 small incisions around navel to insert a laparoscope: a small narrow tube with a camera attached to a light source, and surgical instruments to access the surgical site.

Hysteroscopy: The surgeon inserts a narrow lit camera and instrument through vagina to gain access to the uterus with no incision.

The Surgeries Performed Using Minimal Access Surgery

- Hysterectomy: Removal of uterus
- Myomectomy: Removal of fibroid & reconstruction of uterus
- Ovarian cyst removal
- Resection & treatment of endometriosis removal of implants and scar tissue with restoration of anatomy and functioning of organs
- Pelvic organ prolapse reattachment and repositioning of prolapsed uterus
- Urinary Incontinence surgery
- Cancer staging / cancer surgeries
- Fertility enhancing surgeries: Metroplasty, Submucous fibroid resection, Opening of tubes
- Evaluation of uterus before ivf
- Tubal ligation for contraception
- Reversal of tubal ligation for restoring fertility

The Future of Gynaecology Surgery: While minimally invasive techniques have helped transform gynecologic - surgery, advancements are made almost every day to help make procedures more efficient, more safe, and even to widen the scope of surgery options that can be offered to patients.

"The potential is endless". We however, need to remember while technology is offering better tools to achieve our tasks, "best outcomes are still dependent on safe surgeons, great quality care and most importantly avoiding un-indicated surgery."



Dr. Ganesh Kumar
MD (Gen Med), DNB (Int. Med), DNB (Cardio), DM (Cardio),
Fellowship in Interventional Cardiology (Rambam Medical Centre, Haifa).
Full Time Consultant - Interventional Cardiologist

TAVR

What is TAVR?

TAVR may be a preferred option for people who have been diagnosed with severe aortic stenosis and are at intermediate or greater risk for surgery. TAVR (sometimes called transcatheter aortic valve implantation, or TAVI) is a less-invasive procedure than open heart surgery. This procedure uses a catheter to implant a new valve within your diseased aortic valve. TAVR can be performed through multiple approaches; however, the most common approach is the transfemoral approach (through a small incision in the leg). Only professionals who have received extensive training are qualified to perform the TAVR procedure. A properly trained and dedicated, multidisciplinary Heart Team at a TAVR Center will conduct a thorough evaluation to determine the most appropriate treatment option for you.

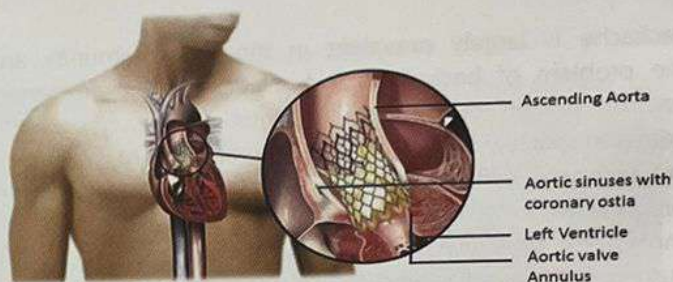
Aortic Valve Stenosis

A hurdle for young at Heart elderly individuals, its treatment options and glimpse of pre-and post-treatment life of such Individuals. As we all know India is a country of young people. Average age of our population is the youngest around the globe. A majority of our senior citizens are also known to be young at heart individuals who lead their life with lot of pride, compassion and without being dependent on any one. Aortic Valve stenosis is a health condition which becomes a hurdle in their life style. It makes life difficult and even day to day activities are stopped because of breathlessness. Let us look at what is Aortic Valve Stenosis, its symptoms and treatment options in today's meeting.

What is Aortic Valve Stenosis and symptoms/difficulties related to it?

Aortic stenosis (AS or AOS) is the narrowing of the exit of the left ventricle of the heart (where the aorta begins). It may occur at the aortic valve as well as above and below this level. It typically gets worse over time. Symptoms often come on gradually with a decreased ability to exercise often occurring first. If heart failure, loss of consciousness, or heart related chest pain occurs due to AS the outcomes are worse. Loss of consciousness typically occurs with standing or exercise. Signs of heart failure include shortness of breath especially when lying down, at night, or with exercise, and swelling of the legs.

Causes include being born with a bicuspid aortic valve and rheumatic fever. A bicuspid aortic valve affects about one to two percent of the population while rheumatic heart disease mostly occurring in the developing world. A normal valve, however, may also harden over the decades. Risk factors are similar to those of coronary artery disease and include smoking, high blood pressure, high cholesterol, diabetes, and being male. The aortic valve usually



has three leaflets and is located between the left ventricle of the heart and the aorta. AS typically results in a heart murmur. Its severity can be divided into mild, moderate, severe, and very severe based on ultrasound of the heart findings.

Treatment Options.

- 1) Moderate cases are treated by putting patients on medication
- 2) Aortic valve can be replaced surgically and this treatment is the most preferred one provided the patient is not too old and is operable.
- 3) In age old patients who are too risky for open heart or other forms of surgery Transcatheter Aortic Valve Replacement (TAVR) has emerged out as an excellent option.

Who is Eligible for TAVR?

Transcatheter aortic valve replacement (TAVR) has been validated as a new therapy for patients affected by severe symptomatic aortic stenosis who are not eligible for surgical intervention because of major contraindication or high operative risk. Recently this option, performed in experienced centres, using next generation devices has demonstrated to be not inferior to standard surgery also in intermediate-risk patients. The safety and efficacy of prosthesis implantation depends on a proper patient selection and procedural guidance, based on a multimodality imaging approach.

Clinical Outcomes with TAVR

A recent clinical study of patients who underwent a TAVR procedure with the SAPIEN 3 valve was shown to have a 75% lower incidence of death and stroke compared to open heart surgery. TAVR may shorten recovery time to allow patients to get back to everyday activities. Patients reported quality of life improvements within 30 days including the ability to take care of themselves.

An overview of the Heart Team at Dr L H Hiranandani, Mumbai.

This procedure is to be performed only by trained professionals and centres which has a complete heart team to treat this condition. Dr Ganesh Kumar did his first TAVR procedure in the year 2017 and since then has given a new improved life to patients. Most of his patients are in their higher 70s and 80s and have been able to lead a much improved and healthy and active life after this procedure.



Dr. Irfan Khan

DM (Cardiology), MD (Internal Medicine), MBBS,
Full Time Consultant - Interventional Cardiologist

PAMI IN THE COVID PERIOD

Covid-19 pandemic has thrown enormous challenges to cardiac physicians and interventionists. The surge of pandemic was coupled with an increased number of patients suffering from acute coronary syndrome (ACS), probably due to the infection as well as due to the surge of inflammatory mediators released during the process of infection. Emergency intervention during such events especially when patients are suffering from ST elevation myocardial infarction (STEMI) is lifesaving.

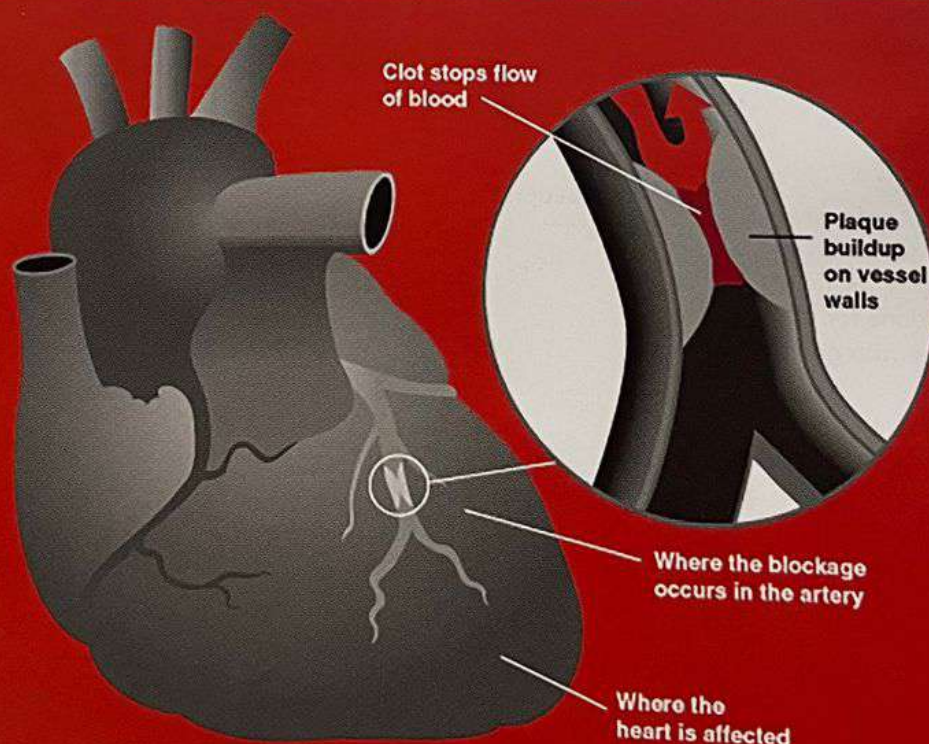
Such patients with their covid-19 infection status being a question mark needed acute intervention also called as (primary angioplasty in myocardial infarction) PAMI at the earliest, but there was always the risk of infection being transmitted to healthcare workers as well as other patients. This situation can be imagined at a time when the turn around time for COVID RT-PCR reporting was 24-48 hrs. This was a precarious situation when patients needed intervention but there is always the risk of transmission of infection. Thrombolysis was being offered to such patients despite this being an inferior treatment strategy.

At Dr L.H Hiranandani hospital before the pandemic had set in, we had a door to balloon time of less than 60 minutes and During the pandemic, we understood that an inferior treatment option (thrombolysis) cannot be offered just because of the risk of infection or transmission, and hence we implemented a strategy in which dedicated hospital staff and dedicated cath lab with appropriate PPE kit (personal protective equipment) will, handle such cases with a target door to balloon time to be maintained of less than 60 minutes.

Such patients were then sent post procedure to a separate isolated site in the Intensive care unit. With this above strategy we were able to offer quality care to all our needy patients in the appropriate time frame.

In the present time, where Covid antigen testing is available around the clock with a turn around time of 30 minutes. All patients planned for PAMI undergoes a covid antigen testing and subsequently the Patients were shifted to catheterisation laboratory, and by the time the procedure is completed covid antigen reporting is available and subsequently the patients are shifted to the appropriate place.

The cardiac team at our hospital assures that no patient is denied quality interventional care irrespective of its covid status.



Dr. Rushikesh Patil
DM (Cardiology), MD (General Medicine), MBBS.
Full Time Consultant - Interventional Cardiologist.



HEART FAILURE



follow up with doctor which forms a very essential part of management and often neglected.

Managing such patients is really a team approach with cardiologist, counsellor for patient education, nutritionist, nurses, psychiatrist, exercise specialist and CVTS surgeon as well.

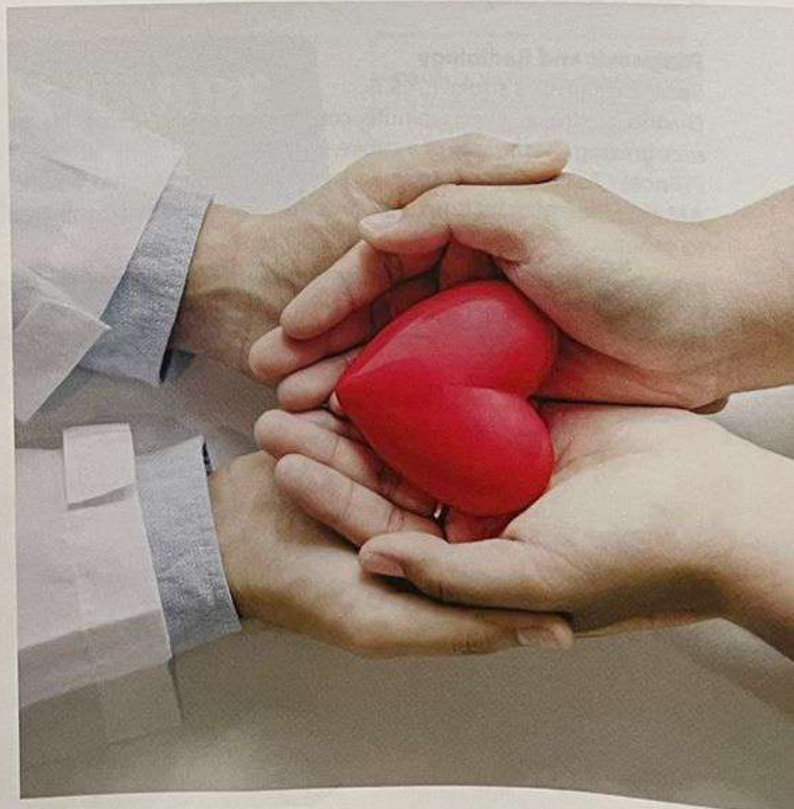
It really requires fine balance of medications, need for special devices in select patients like AICD (automated implantable cardioverter defibrillator) to reduce sudden cardiac death, CRT (cardiac resynchronization therapy) to improve heart function, angiography and sos revascularization either by angioplasty or CABG (bypass surgery) and New ray of hopes with advanced heart failure management with artificial heart (LVAD) and heart transplant in refractory cases. Together, you and we can determine the best course of treatment for you.

Heart failure means not exactly that heart stops working but it isn't pumping enough blood as it should be. It is common in person with history of old heart attack or those who have blockages in coronary arteries, long standing diabetes mellitus, uncontrolled blood pressure, valve abnormalities and certain familial conditions.

As age expectancy has increased in India and also the people have adopted sedentary lifestyle which has resulted into multiple co-morbidities like diabetes mellitus, obesity, heart disease etc. so the burden of heart failure is also increasing.

In past we had limited options for treatment of such patients hence life expectancy of such patients always turned out to be poor with survival at the end of 5 years use to be just 50%, with high chances of sudden cardiac death and poor quality of life but now definitely there is new ray of hope with advance heart failure care including artificial heart.

Patient can prevent heart failure from worsening to some extent by controlling the blood pressure, keeping track of vitals like body weight, blood pressure, some symptoms and accordingly titrating the medications, fluid management, dietary modifications, compliance with medications and regular



Dr Swarup Swaraj Pal
MBBS, MS (General Surgery), MCh (Cardio Vascular and Thoracic Surgery).
Full Time Consultant - Cardio Vascular & Thoracic Surgery

FUTURE OF CARDIAC SURGERY



Cardiac surgery has always held the imagination of doctors and patients alike! From the days of open heart surgery.. to minimally invasives.. and then to robotics.. and finally the best of all worlds, HYBRID approaches have redefined the level of care in the field of heart care!

Student, you do not study to pass the test. You study to prepare for the day when you are the only thing between the patient and the grave! [an old quote in cardiac surgery].

This was precisely why this field has been the most intense and has had the most innovations! Every life is valuable and must be saved.

Cardiac diseases are a major cause of mortality and morbidity. Patients are presenting with more challenging surgical indications. Indeed, the number of fragile, elderly and other high risk patients eligible for invasive treatments have grown.

This is what the future offers-

Coronary Artery Disease

Blockages in the arteries continue to be treated with drug eluting stents. But , a significant number of patients with all three vessels affected with diabetes are best treated with Beating heart bypass surgery. Also hybrid approaches including using stents and performing minimal invasive bypass will be used more often in the future.

Valvular Heart Disease

The heart has 4 valves. The Aortic valve when damaged can be replaced. In the future Aortic valve repair will hold and important step. It is done for the mitral and tricuspid valves with good results.

TAVR is percutaneous aortic valve replacement and is done with good results. Surgical sutureless valves and new generation valves ,with valve-in-valve option in the future ,are recent advancements.

Robotic valve surgeries give better valve visualization and will be done more frequently in the future.

Heart Failure Surgery

Transplants and LVADs / BiVADs [VAD = Ventricular assist devices] are going to be the future in the patients whose life expectancy is minimal owing to the failing, dilated heart. Interim supportive measures like ECMOs are used more frequently to stabilize the acutely ill patient before a Tx/VAD.

Thoracic Aortic Disease

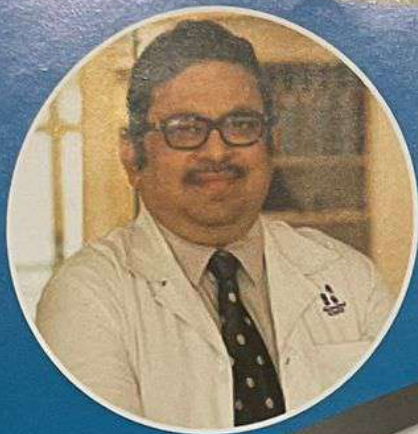
Endovascular stenting with surgical debranching of the major vessels arising from the aorta is a futuristic tool for treatment of aortic aneurysms.

Arrhythmia Surgery

Atrial arrhythmias can be surgically obliterated by MAZE procedure. This is routinely done during valve surgeries. Epicardial pacing leads can be placed in those with heart block and requiring a pacemaker, in selected cases.

Thus, the future promises to enhance and enrich the lives of those who have heart disease and surgery is going o be the most important component in it.





Dr. Sanjeev Jain

M.CH. Orth. (UK), M.S. Orth., FASIF (Germany), Fellowship - Joint Replacement (Primary & Revision), Hip Resurfacing & Sports Medicine (USA).
Full Time Orthopaedic & Joint Replacement Surgeon

TOTAL KNEE REPLACEMENT

Most of the patients who has advanced painful disabling arthritis of knees need total knee replacement of both sides. This advise of orthopedic surgeon is taken by surprise by the patient as they feel it is not safe to have simultaneous both sides knee replacement.

I have been doing joint replacement for almost 25 years plus and experienced that with time there have been many developments towards better technique & technology, materials & knee implant design, safety profile & precautions, pain management protocol and postoperative rehabilitation program.

Many patients ask me why it is necessary to have both knees replaced simultaneously? My simple answer is when there is a problem in day-to-day activities of life with equally painful both knees then it is better to have both knees operated same time. This will not only cut down over all recovery time but will help in reducing chance of one more time hospitalization, anesthesia and of course overall cost.

As far as rehabilitation in concern then rest assure that physiotherapy exercises are not painful, in fact recovery with modern techniques is quite fast as compare to earlier days. The most important part is to pain management which is wonderfully managed by team of anesthetists so nicely that we discharge our all both sides knee replacement patients 2 days after surgery. At home also pain is managed by necessary medications.

It's very natural that everyone who undergoes surgery at age of 60 plus with any existing medical problem is worried about safety

and complications. We follow a very strict clinical care pathway system and investigate patients in detail, so we do not miss any kind of high-risk condition. Patient safety is topmost priority in our total knee replacement care system. Complications rates are nil or negligible practically as we take utmost care and precautions.

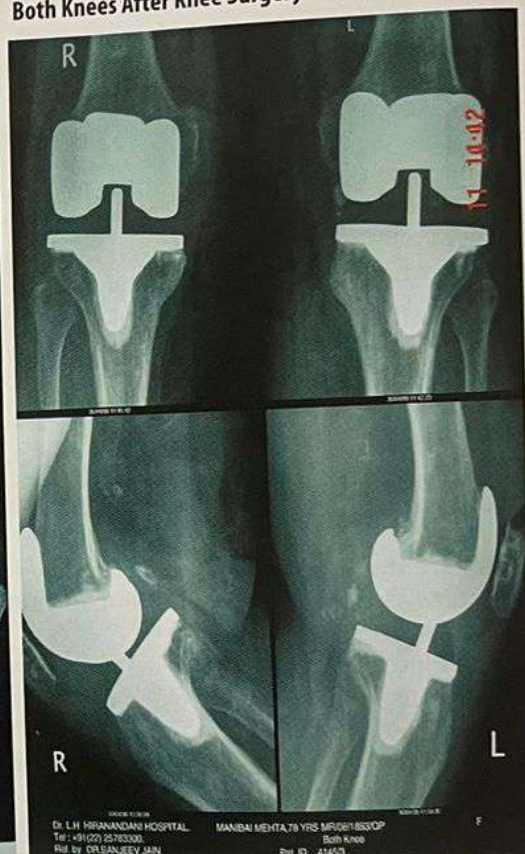
One is also worried about long term results and function post-surgery. Preoperative clinical condition of knee deformities and preoperative range of movements determines postoperative functions and knee bending. Quality of bone of patient during surgery, type of material used as knee implant and computer assisted surgery will also helps to get better function and excellent long-term results.

Finally, it's an experienced surgeon who can deliver expected results and keep all the patients happy to improve their quality of life.

Both Knees Before Knee Surgery



Both Knees After Knee Surgery



Dr Pradeep Kumar Singh

MBBS, MS (Orthopaedics Surgery), DNB (Orthopaedics), PhD (Orthopaedics), Fellowship in Spine Surgery, FMISS, Minimal Invasive Surgery, Joint Replacement Fellow Neurochirurgischen. Full Time -Spine Surgeon

AWAKE LUMBAR DISCECTOMY



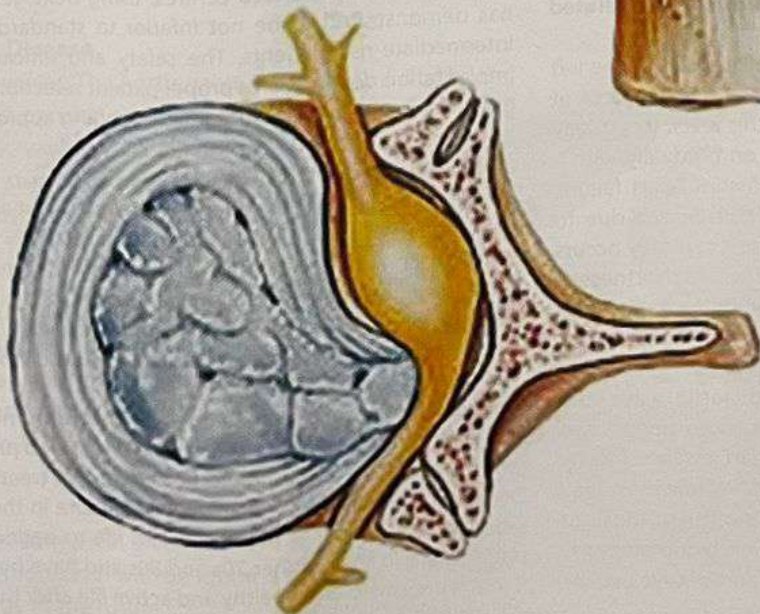
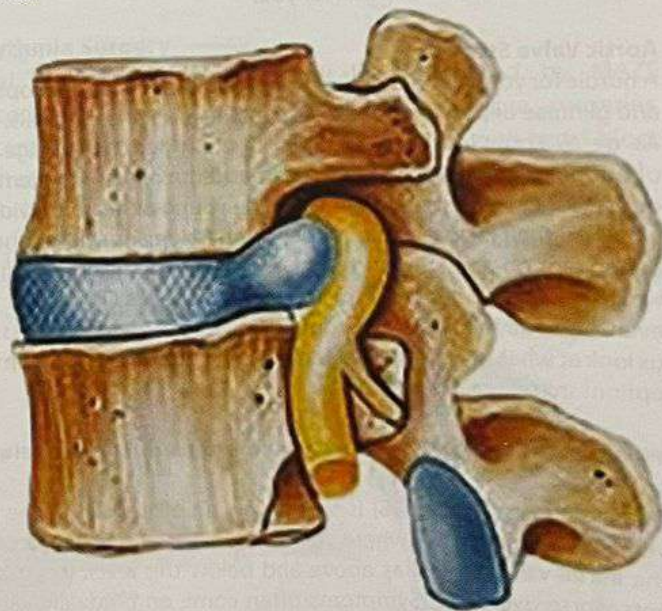
Backache is largely prevalent in modern community and the problem of back pain and sciatica has become more confusing than ever. The understanding about backache has been sparsely discussed in the literature, due to which there are technical difficulties in making diagnosis in the current practice. More over imaging studies which do not diagnose pain most of the time give no clue to the clinician and patients. The surgeon normally diagnoses pain based on narration by patient, examination in clinic setting and imaging studies. Therefore, the pain diagnosis is mostly inappropriate and incomplete by following school of conventional thoughts which is based on prediction and so is the treatment of the same.

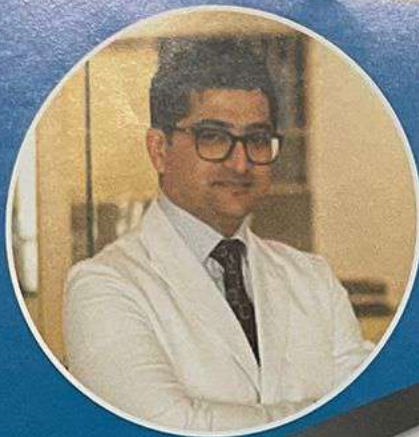
Conventional surgical options for the treatment of lumbar disc herniation's include laminectomy and discectomy. These surgeries essentially require extensive soft tissue dissection, loss of bone stock and partial facetectomy. Fundamentally, laminectomy, facetectomy, ligamentum flavum excision makes spine unstable in due course of time.

Percutaneous endoscopic discectomy is gaining profound popularity in current clinical practice as the procedure essentially requires no tissue compromise. Percutaneous endoscopic discectomy is being performed under local analgesia that enables better understanding of pathophysiology of pain and precise localization of pain generators. Intraoperative

evaluation of back and leg pain of the patient has been extremely helpful for better results of the surgery. The patient himself prompts surgeon about exacerbation or relief of pain. Awake surgery has enriched our thinking about this problem of pain from back and sciatica. Therefore, understanding about the pain generator has become relatively accurate.

Current evidence on the effectiveness of transforaminal endoscopic surgery are encouraging. To conclude awake discectomy is an excellent and safe option for backache and sciatica.





Dr. Aditya Sai Kadavkolan
MS, DNB (Orthopaedics).
Full Time Consultant - Orthopaedic

TREATING THE FULL SPECTRUM OF SHOULDER PAIN

The shoulder joint is surrounded by a group of muscles called the rotator cuff which provide it mobility as well as stability. Rotator cuff disease causing shoulder pain is common and can vary from tendinitis (Inflammation) to complete tears. Tears occurring in the younger age group are due to trauma and in the elderly due to degeneration. These disorders can cause pain especially in the night difficulty in movement. Many a time these are missed as a frozen shoulder.

Surgery is sometimes required for the problematic disorders. Whereas small tears can be managed non-operatively larger tears require surgical repair. For complete tears of the rotator cuff surgical repair provides excellent and reliable long-term treatment option.

In long standing rotator cuff tears the rotator cuff degenerates and in such a scenario repair is not possible. In these situations a newer variety of shoulder replacement called Reverse Shoulder arthroplasty (RSA) may be done. RSA done for such problems shows excellent pain relief and good functional outcomes.

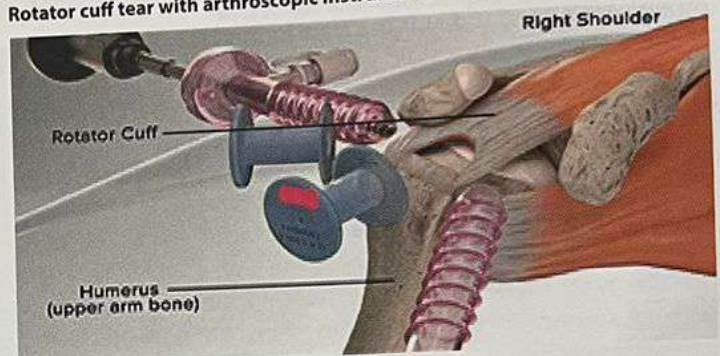
At Dr. LH Hiranandani Hospital we have consistently given the best of the results for shoulder problems. This has been made possible because of:

a) Arthroscopy: Arthroscopy is a minimally invasive surgery



An example of a reverse shoulder arthroplasty for massive rotator cuff tear

Rotator cuff tear with arthroscopic instruments



Repaired rotator cuff



done through very small cuts around your joint. The surgeon inserts a small camera (4.5mm and in some cases 2.9mm) and visualizes and repairs the joint damage. Arthroscopic surgery minimizes hospital stay, provides better cosmesis and a faster return to full function

b) Use of newer proven techniques for rotator cuff repair, newer smaller bio-absorbable implants that leave a smaller footprint allowing better bone to tendon healing.

c) Imaging: With a state of the art MRI we are able to diagnose shoulder problems better

d) Physical therapy: The role of physiotherapy to recover from shoulder injuries cannot be over emphasized.

e) Orthobiologics: Sometimes individuals don't respond to physical therapy but the shoulder injury is not severe enough to warrant surgery or time is of essence, as in an athlete who has a competition coming up; then we have injections like PRP which can accelerate the healing.



Dr. Nilesh Chaudhary
MBBS, DNB (Gen. Medicine), DNB (Neurology)
Full Time Consultant – Neurology

COVID & ACUTE STROKE (BRAIN ATTACK)

Stroke (brain attack) associated COVID-19 infection are rising as pandemic continues which accounts for 1 – 6 % of covid 19 infections. Onset of acute stroke from acute COVID-19 infection was from 0-14 days with maximum risk in initial 4 days. WHO had set case definition to diagnose stroke associated with SARS –Cov -2 infection.

Neuropathogenesis of stroke in Covid 19 infection

- Early inflammatory process destabilising a carotid plaque or triggering atrial fibrillation.
- Pro thrombotic state
- A vasculitis process of cerebral artery.

Types of stroke

1. Ischemic stroke – Due to blood supply blocked by clot in blood vessel (most common)
 2. Hemorrhagic stroke - Due to rupture of blood vessel wall causing bleeding in brain.
- Diagnosis doesn't differ from non - COVID-19 associated stroke in emergency but requires detail history of contact with covid suspect, recent fever or cough.

Diagnosis and Radiology

Spot the sign of a stroke F.A.S.T

During a stroke, every minute counts. You could save a life by recognizing these signs of a stroke.

F(Face) - Ask the person to smile. Is one side of the face is drooping.
A(Ask) - Patient to lift both arm, one arm is drifting down compared to other.

S(Speech) -Ask patient to speak, speech is slurred.

T(Time is brain) Emergency medical attention required, take patient to the nearest stroke center.

Diagnosis & Radiology

CT or MRI brain

Laboratory diagnosis

Covid antigen /RT PCR

Inflammatory and prothrombotic parameters (CRP, d -Dimer) found to be high in covid associated stroke.

Coagulopathy assessment

Treatment

Treatment is the same as non-covid stroke with protected stroke CODE.

Ischemic stroke treatment

If patient visits emergency with in 4.5-hour best treatment can be offered to avoid morbidity

- Intravenous r-TPA(≤ 4.5 hours)
- Mechanical thrombectomy(≤ 6 -24 hours)

Haemorrhagic stroke treatment

Treatment of coagulopathy.

Management of associated risk factors is must in both types.

Our experience

We have treated 48 acute strokes in pandemic with ischemic stroke (88%) and hemorrhagic stroke (12%).

We have set protocol to separate covid and non covid stroke at emergency with separate entrance.

COVID-19 associated strokes are admitted in separate ward or ICU with separate entrance and lift facility.

All-cause mortality in COVID-19:

