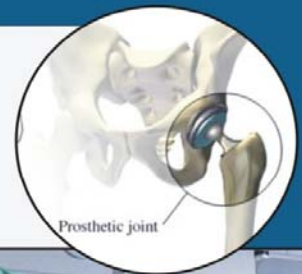


Get Back To Your Active Life

HIP REPLACEMENT SURGERY

With ORTHOPILOT

A Pathbreaking Procedure Using Advanced Computer Navigation Technology



"I feel and move more like myself again; I only wish I had done this surgery much earlier"

– Patient who underwent Hip Replacement Surgery

12,000+ Patients Treated Successfully



Dr. Santosh Kumar

MBBS, D.Ortho, M.Ch.[Ortho],
Joint Replacement Specialist

POORVA ORTHOPAEDIC FOUNDATION

PATIENT GUIDE

About Dr.Santosh Kumar



MBBS (JIPMER), D.ORTH (JIPMER); MCh ORTH (SCYCHELLS)
Head : Department of Computer Assisted Joint Replacement Surgery : BELLE VUE CLINIC
JOINT REPLACEMENT SURGEON, ARTHRITIS FOUNDATION,INDIA
Subspecialty- Knee Joint- Total Knee Replacement, Knee Arthroscopy.
Fellowship in Joint Replacement, Max Hospital, New Delhi
TRAINED IN COMPUTER ASSISTED JOINT REPLACEMENT FROM AUSTRIA
Trained in Revision Knee and Hip Replacements
Trained in Complex Joint Replacement from the DELTA FOUNDATION of AUSTRALIA

INTRODUCTION

Dr Santosh Kumar and his team are leading knee specialists in Kolkata. He is one of the best doctors in Knee replacement today. Knee replacements are routine in Kolkata (Calcutta) today and Dr Santosh Kumar has been instrumental in making international quality knee surgery affordable to the mass.

HE HAS EXPERIENCE OF MORE THAN **TWO THOUSAND KNEE REPLACEMENTS**



GRADUATION

MBBS – from Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER, Pondichery) Directorate General of health Services, Govt. of India from 1995 to 2001.
HOUSE JOB in Department of Orthopedics, JIPMER from April 2001 to June 2002.

POST GRADUATION

D Orth from Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER, Pondichery) Directorate General of health Services, Govt of India from 1st April to 31st March 2005.

BONE BANK JIPMER

In charge bone bank JIPMER from April 2004 to March 2005. TRAUMA COURSE online of ADVANCED TRAUMA LIFE SUPPORT at CMC Vellore January 2005.
Clinical Research Fellow in Orthopaedic Oncology at JIPMER Hospital from April 2005 to June 2005.

REDISTRAR ORTHOPEDICS

Whole time registrar in Orthopaedics at Bhattacharyya Orthopaedics and Related Research Center (P) Ltd., Narayanpur, Kolkata – 136 from 1st July 2005 to 31st June 2007.

MCh ORTH

Passed MCh ORTH from the University of Seychelles American Institute of Medicine, March 13th 2008.
MCh Thesis : a study into the controversial aspects of interlocking nail of femur.

TRAINING

DELTA COURSE for advanced aspects of complex primary and REVISION knee replacement. At MAX Hospital , New Delhi in Sept, 2008.
FELLOWSHIP in KNEE REPLACEMENT in Max Hospital, New Delhi from Sept, 2008 with Dr. S.K.S. Marya for total of 54 knee replacement surgeries.
AO SPINE Training in Bombay July 2009.
AO TRAUMA Training 8th to 10th Oct, 2009, Kanpur
DELTA COURSE for Advanced Aspects of Complex Primary and Revision Knee Replacement, at SUN SHINE Hospital, Hyderabad in Nov, 2009.
Ranawat joint replacement course in Jan 2010 Kolkata
Trained in complex joint replacements, at Bangkok. Jan 2011 by DEPUY institute at Bangkok
Trained in revision joint replacements by DE PUY institute at Chennai, June 2011.
Medtronic Academy course in cervical spine in October 2011
Trained in computer assisted knee replacement at Fortis Chandigarh in Jan 2012
AO advanced trauma course in March 2012 at Kolkata

TRAINING [continued]...

Trained in complex joint replacements in USA , PHOENIX, by KLEOS foundation (Smith and Nephew educational body) April 2012
Trained in minimally invasive spine surgery by Medtronic Academy foundation May 2012
Trained in computer assisted navigation technology for knee replacement in Vienna Austria, in June 2012.

PAPERS PUBLISHED / PRESENTED

Bilateral fracture dislocation of Hip, pipkin 1 – its management and the result – published in the West Bengal journal of orthopaedics – vol 20, number 2, September 2006, myself as Primary author.
The role of total hip replacement in ankylosing spondylitis patients – under consideration for publication in the Indian journal of orthopaedics.
OPPONENSPLASTY – a method to reconstruct the post polio paralytic thumb – presented at the midcon 2005, West Bengal Orthopaedic Association.
Follow up of 24 total hip replacements in ankylosing spondylitis patients presented at the annual conference of the West Bengal Orthopedics Association 2006.

AWARDS RECEIVED :

Dr.Santosh Kumar received Certificate of International Excellence in Minimally Invasive Computer Assisted Joint Replacement Surgery by the ASCULAP ACADEMY, Germany



Titles

Part A

1. Hip Pain
2. Osteoarthritis
3. Rheumatoid Arthritis
4. Trauma related Arthritis
5. The Hip Joint
6. Hip Replacement
7. Your Hip Evaluation
8. Surgery
9. Physical Therapy
10. Progress
11. Home Care
12. Medication / Pain Control
13. Resuming Activities
14. Special Instructions



Part B

15. Other Patients' Experiences
16. For Outstation Patients
17. For International Patients
18. For Corporate Patients
19. For Communities / Institutions
20. What the Press / Media says
21. Cashless Mediclaim Facility
22. The Fees
23. Online Consultation / Video Conference
24. About The Doctor / Surgeon
25. About the Foundation
26. Contact Details

HIP
REPLACEMENT
SURGERY

SECTION A



Hip Pain

Arthritis is the leading cause of disability in India, and the most frequent cause of discomfort and chronic hip pain. In fact, it's estimated that 1 in 5 people in India has some form of arthritis. Two-thirds of the people who have been diagnosed with arthritis are under the age of 65.

Of the more than 100 types of arthritis, the following three are the most common causes of joint damage:

1. Osteoarthritis
2. Rheumatoid Arthritis
3. Trauma Related Arthritis



Arthritis

Osteoarthritis is a disease which involves the wearing away of the normal smooth joint surfaces. This results in bone-on-bone contact, producing pain and stiffness.

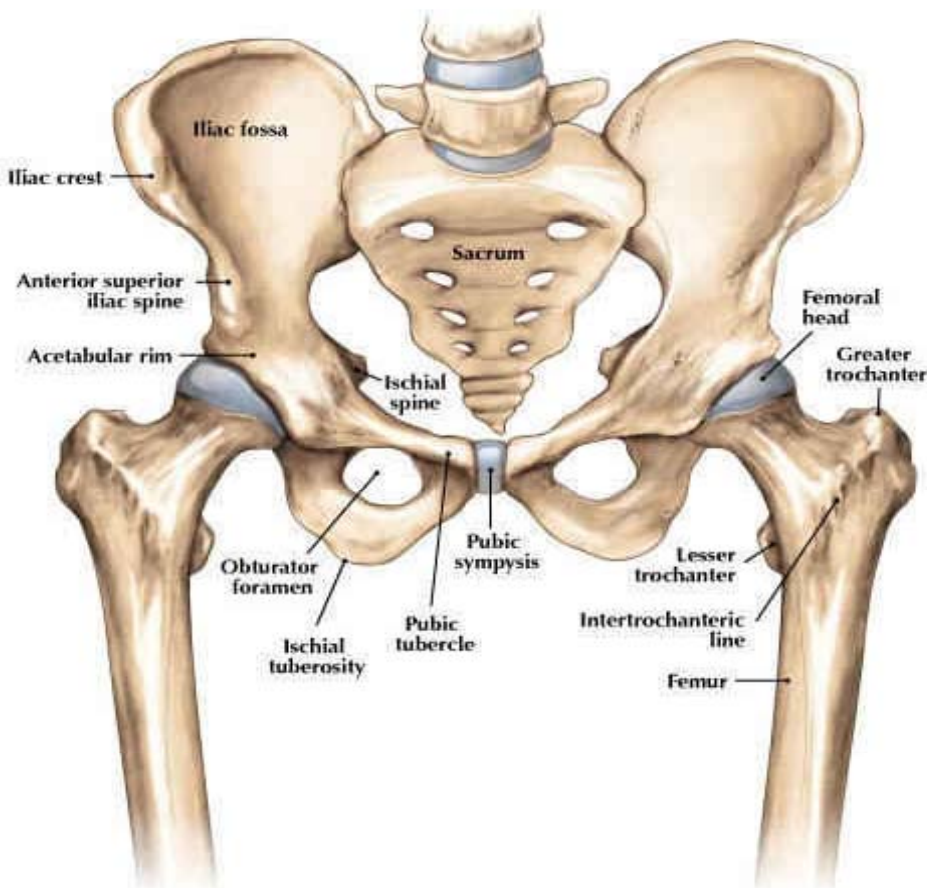
Rheumatoid arthritis is a systemic disease because it may attack any or all joints in the body. It affects women more often than men and can strike young and old alike. Unlike osteoarthritis, rheumatoid arthritis causes destruction of the joint through severe inflammation. The body's immune system attacks and destroys the synovial lining covering the joint capsule, the protective cartilage and the joint surface. This causes pain, swelling, joint damage and loss of mobility.

Trauma-related arthritis results from damage to the joint from a previous injury. It also results in joint damage, pain and loss of mobility.



General Anatomical Overview

- The hip is one of your body's largest weight- bearing joints.
- It consists of two main parts:
a ball (*femoral head*) that fits into a rounded socket (*acetabulum*) in your pelvis.
- Ligaments connect the ball to the socket and provide stability to the joint
- The bone surfaces of your ball and socket have a smooth durable cover of *articular cartilage* that cushions the ends of the bones and enables them to move easily.
- All remaining surfaces of the hip joint are covered by a thin, smooth tissue called *synovial membrane*. In a healthy hip, this membrane makes a small amount of fluid that lubricates and almost eliminates friction in your hip joint.
- Normally, all of these parts of your hip work in harmony, allowing you to move easily and without pain.



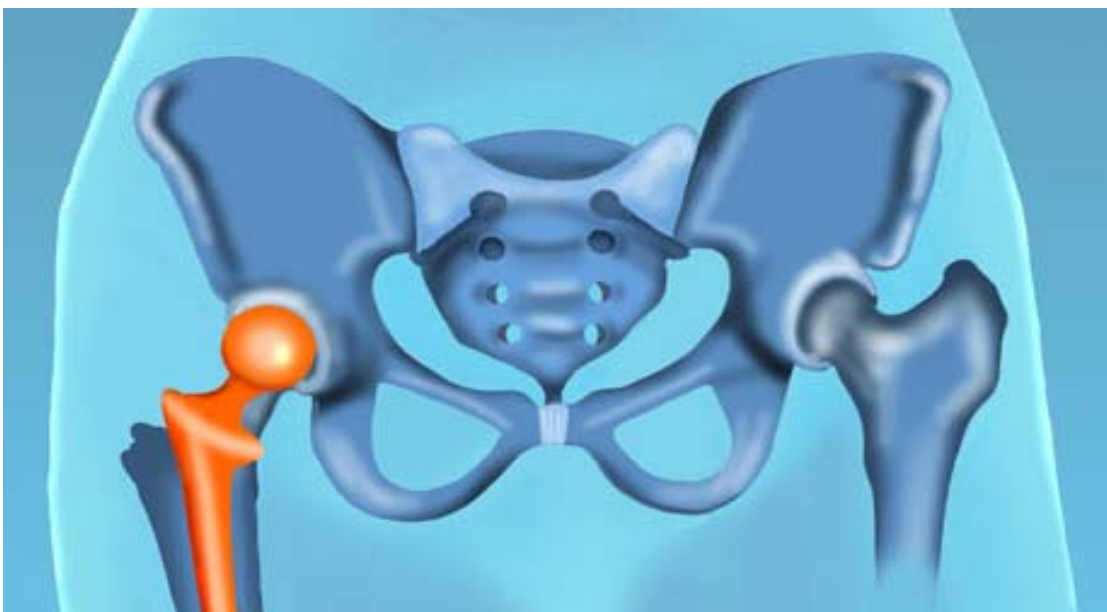
ANATOMY OF THE HIP



Total Hip Replacement

When medication, physical therapy and other conservative methods of treatment no longer relieve pain, total hip replacement may be recommended. Total hip replacement helps relieve pain and allows patients to perform some activities that may have been limited due to hip pain.

More than lakhs of people world wide annually undergo hip replacement surgery to relieve pain and stiffness and restore mobility. Total hip replacement is the replacement of the ball and socket of the hip joint with implants. There are two main components used in total hip replacement. The acetabular shell replaces the hip socket. The femoral stem replaces the worn-out top of the femur. These components may be made of any number of materials, including metal, ceramic and/or polyethylene (medicalgrade plastic). During surgery, the head of the femur (thigh bone) is removed and replaced with both a stem and socket, mimicking your existing anatomy.



Your hip evaluation

The orthopaedic surgeon will ask you many questions about your hip pain as well as your general health to determine if hip surgery is appropriate for you. The evaluation will include a careful review of your X-rays and other tests. This will help the surgeon understand your pain and limitations in activity and the progression of your condition.



During your physical evaluation, the range of motion of your hips and knees will be measured, and muscle strength will be evaluated. The surgeon will observe how you walk, sit, bend and move.



Surgery

To prepare yourself for surgery, you may be asked to do a number of things, including lose weight and/or stop smoking (if applicable). It is essential that you tell your surgeon about any medications or supplements you are taking. Bring a list of all medications and dosages, including over-the-counter medicines. Your doctor may want you to donate your own blood ahead of time for a possible transfusion during surgery. It is normal to feel pain and discomfort after surgery. Be sure to let the nurse know if you are in pain.

The usual hospital stay for hip replacement is three to five days. To protect your hip, you will be asked not to sit up beyond a 90-degree angle. Whatever assistive devices you need will be provided. After 24 hours, you should begin to eat and drink regularly, according to your surgeon's direction.

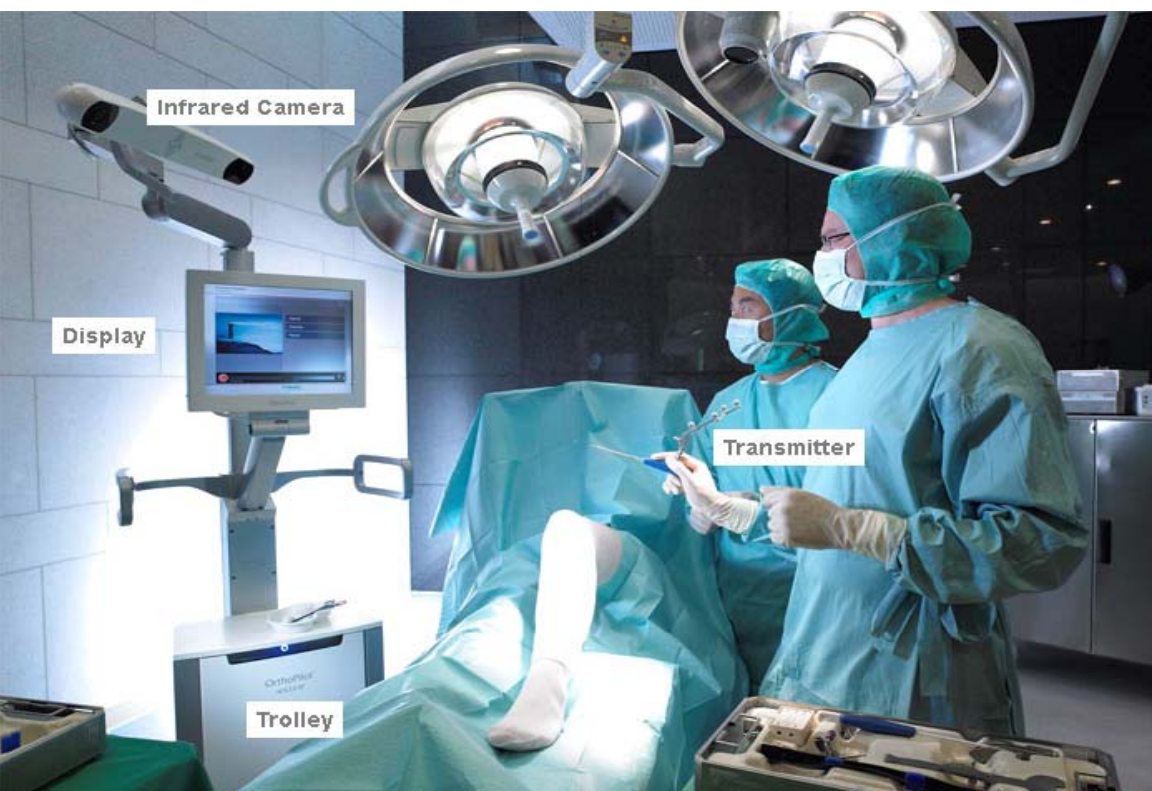


Your surgery is done here



Statistical Overview

- First performed in 1960.
- Since then, improvements in joint replacement surgical techniques and technology have greatly increased the effectiveness of this surgery.
- Dr.Santosh kumar does the surgery using advanced computer navigation system - Orthopilot



Subjective Assessment

- Pain localized in hip region
- Exaggerated gait pattern (limp)
- Increase in pain when weight bearing
- Reduction in the degree of ROM
- As the degeneration of the joint worsen, individual may be awakened at night with pain
- Bone spurs may occur



Osteo arthritis of the right hip is visible in this x-ray



Objective Assessment

- Gait pattern – Adaptive walking pattern that reduces pressure on the affected side.
- Muscle atrophy – Muscles in affected area are not used as much due to pain, therefore, use-it-or-lose-it applies.
- Active Range Of Motion – Limited ROM, stiffness
- Passive ROM – End feels causes severe pain
- X-ray – clear degeneration of the bone
- MRI – determines underlying complications (e.g. avascular necrosis)



X-RAYS

Osteoarthritis



Fracture



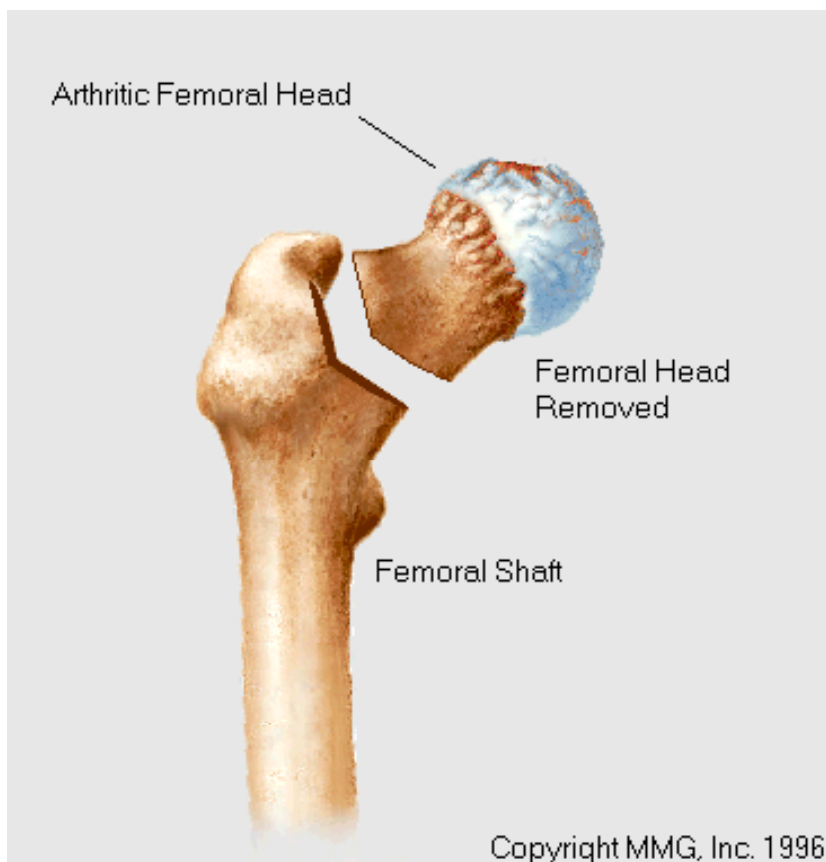
Advanced Diagnostic Facilities are available here



Operation [Surgery]

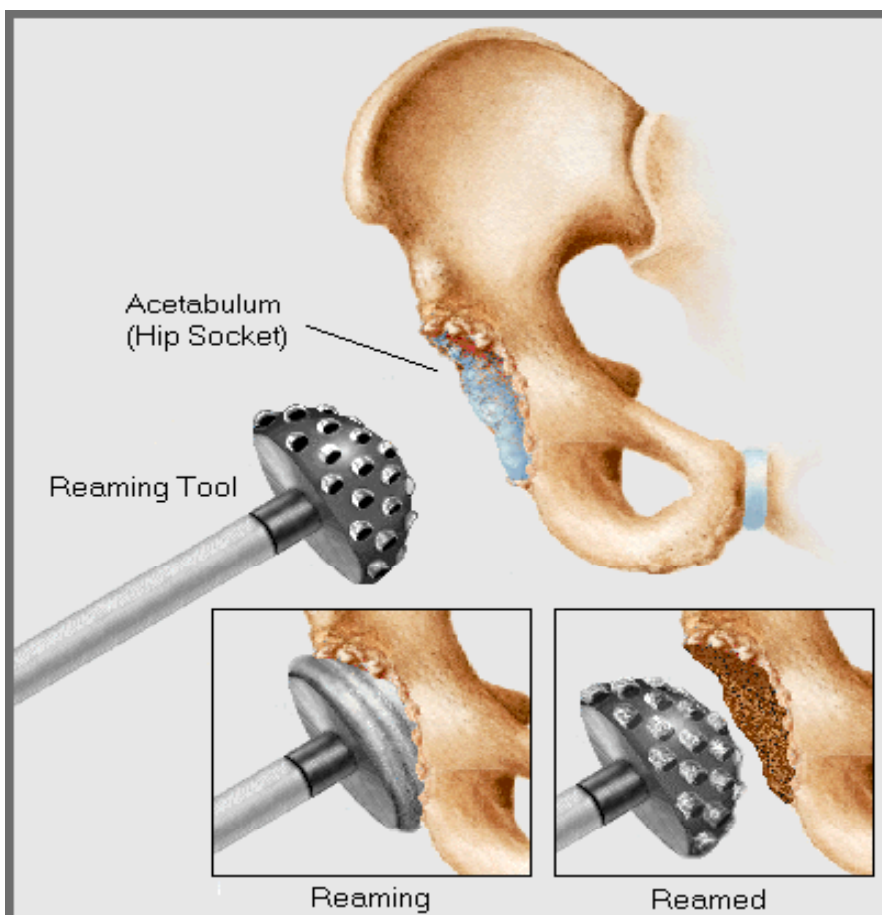
Removing the Femoral Head

- Once the hip joint is entered, the femoral head is dislocated from the acetabulum.
- Then the femoral head is removed by cutting through the femoral neck with a power saw.



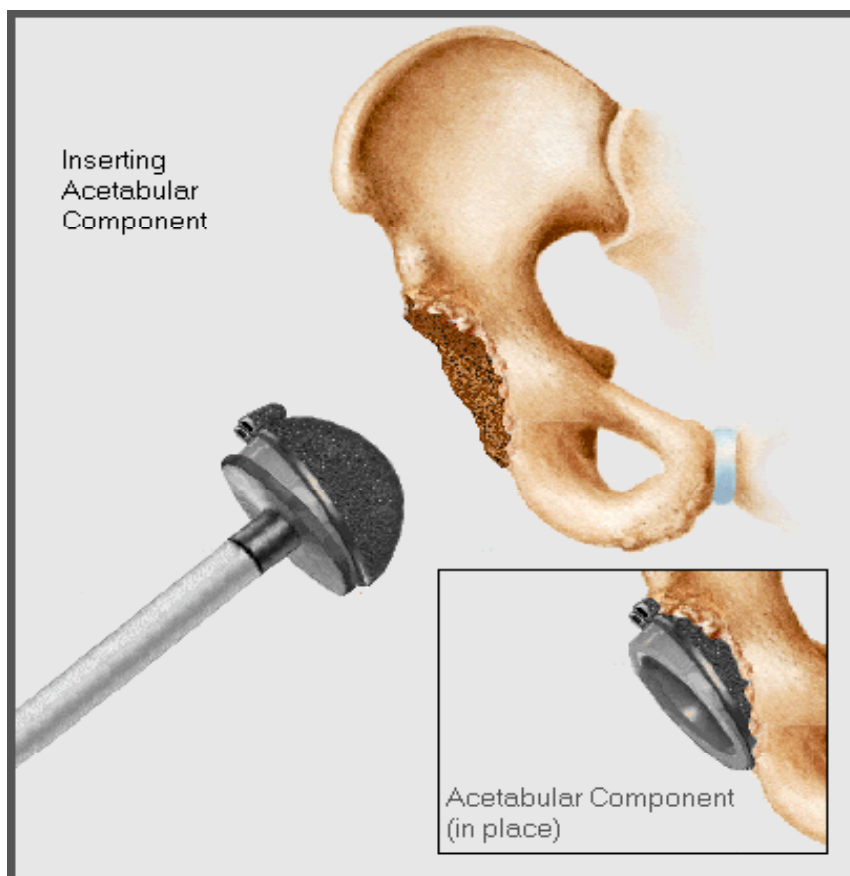
Reaming the Acetabulum

- After the femoral head is removed, the cartilage is removed from the acetabulum using a power drill and a special reamer.
- The reamer forms the bone in a hemispherical shape to exactly fit the metal shell of the acetabular component.



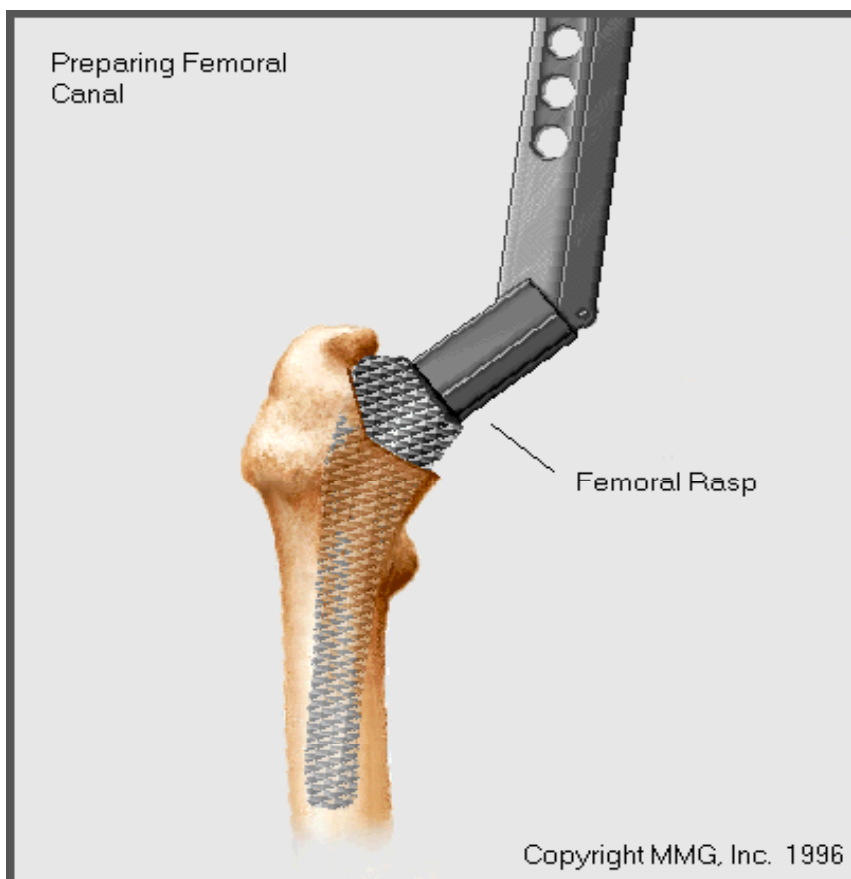
Inserting the Acetabular Component

- A trial component, which is an exact duplicate of your hip prosthesis, is used to ensure that the joint will be the right size and fit for the client.
- Once the right size and shape is determined for the acetabulum, the acetabular component is inserted into place.



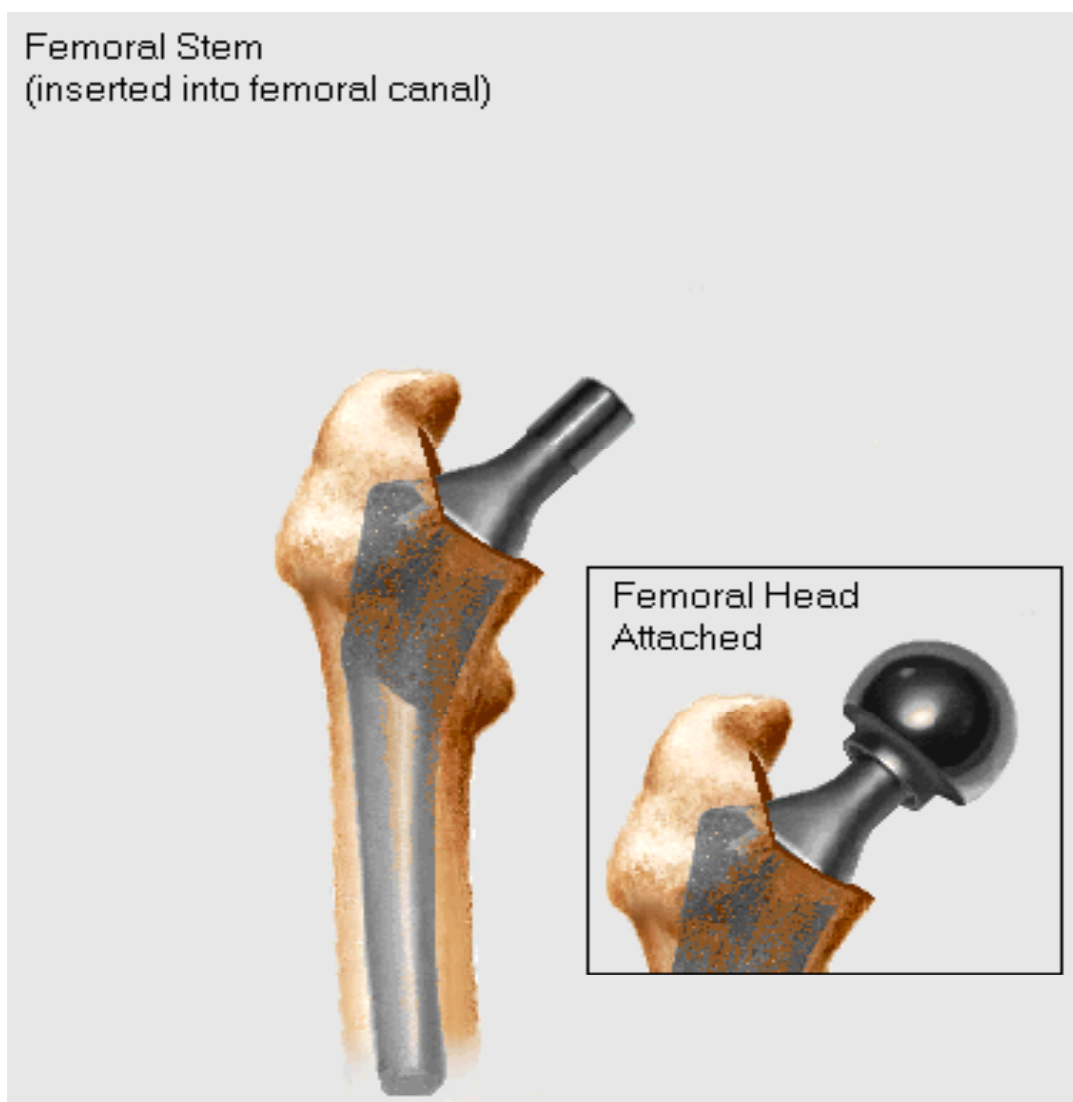
Preparing the Femoral Canal

- To begin replacing the femoral head, special rasps are used to shape and scrape out femur to the exact shape of the metal stem of the femoral component.
- Once again, a trial component is used to ensure the correct size and shape. The surgeon will also test the movement of the hip joint.



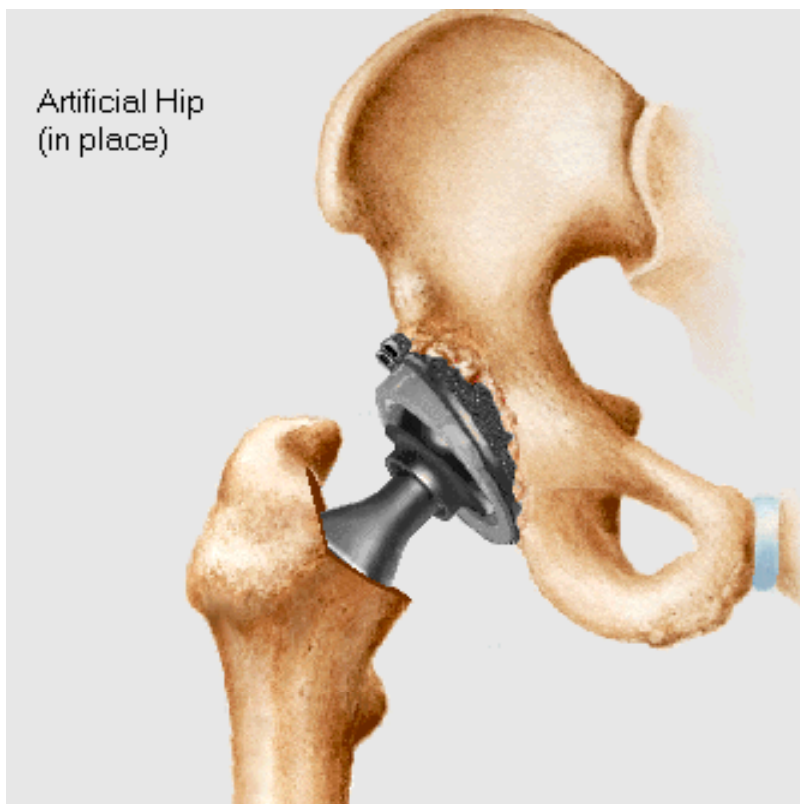
Attaching the Femoral Head

- The metal ball that replaces the femoral head is attached to the femoral stem.



The Completed Hip Replacement

- Client now has a new weight bearing surface to replace the affected hip.
- Before the incision is closed, an x-ray is made to ensure new prosthesis is in the correct position.





Dr.Santosh Kumar here is seen with the advanced Orthopilot System : used in Hip Replacement surgery

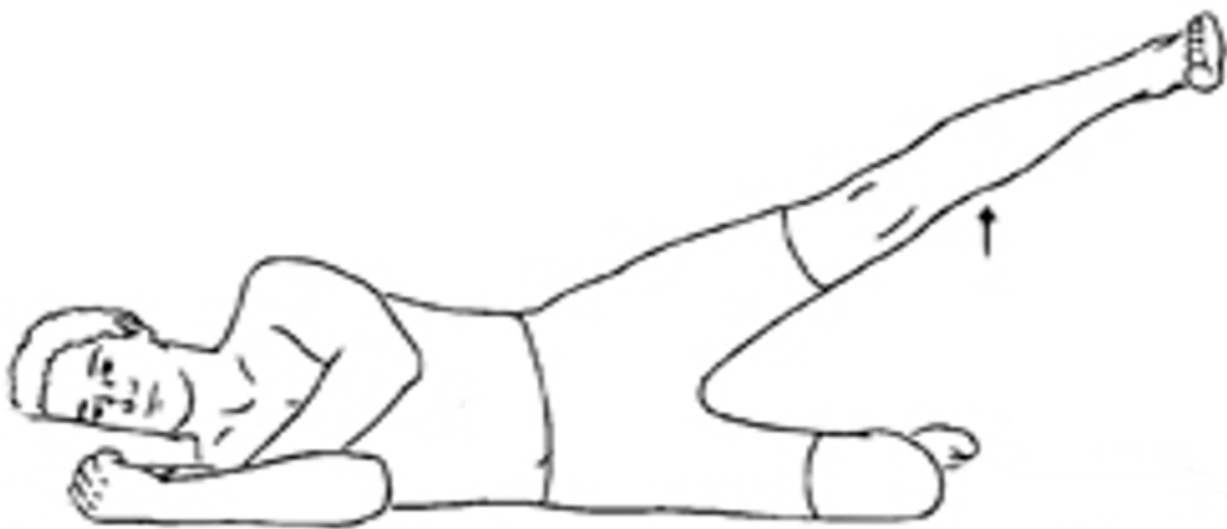
Joint Prosthesis are made as per Patients' need using this advanced system. Very few surgeons have access to this technology in India.



Treatment by Kinesiologist

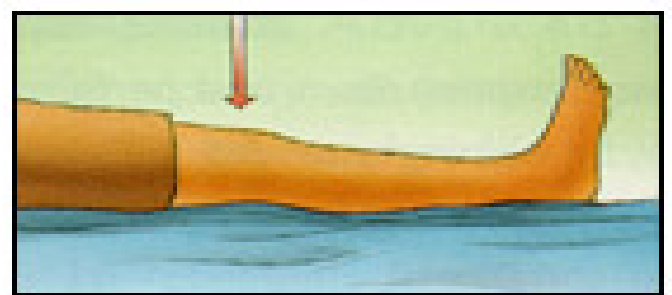
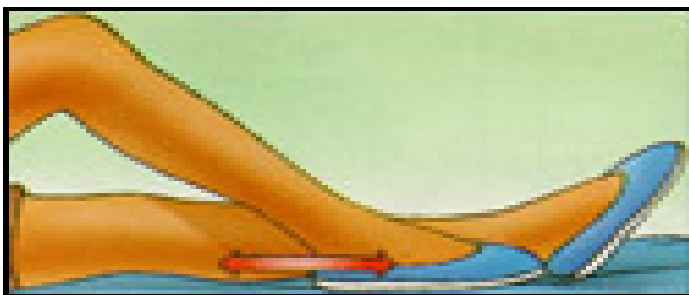
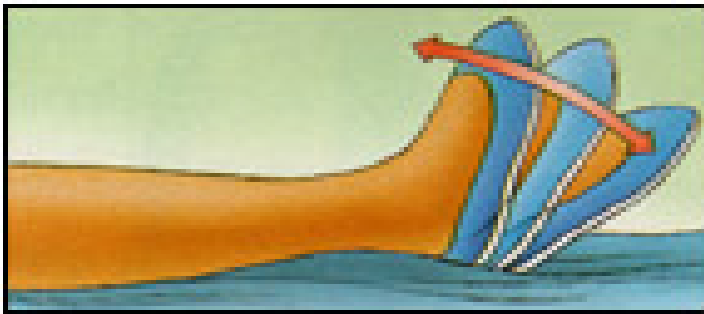
Early Postoperative Exercises

- Regular exercises to restore your normal hip motion and strength and a gradual return to everyday activities.
- Exercise 20 to 30 minutes a day divided into 3 sections.
- Increase circulation to the legs and feet to prevent blood clots
- Strengthen muscles
- Improve hip movement



Exercise Prescription

Early Stage



- The patient is released few days after the surgery
- A list of Do's and Don'ts given
- Hip may be sore and weak
- Start with light exercises

- **Ergonomics:**

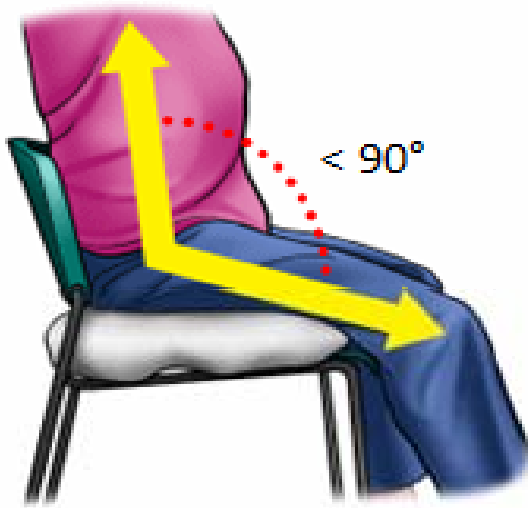
Rearrange furniture in the house to make using crutches easier. Setup a 'recovery centre', a table where you put phone, remote control, radio, medication and other essential things that you need. It makes it more accessible.



- Do's and Don'ts -

- To avoid hip dislocation:
- Use 2-3 pillows between your legs when sleeping (roll onto your 'good side')
- Do not cross your legs
- Use chairs with armrest
- Do not bend forward past 90 degrees
- Use a high-rise toilet seat if necessary
- Avoid pronation of the legs
- To avoid stairs, sleep in the living room





In sitting **Do Not** bend hip above 90 degree



Do Not cross legs when sitting



Do Not bend body forward to pick objects



Do Not rotate leg when standing. Keep leg straight



Exercise Prescription - Later Stages -



Progress

The therapist will teach you how to dress, get out of bed without help and use a walker or crutches. You will continue to work to strengthen yourself in preparation for your return home.

It is important for you to follow your surgeon's directions and proper positioning techniques throughout your rehabilitation. By the time you leave the hospital, you should be progressing well in regaining your mobility and stability.

When your sutures or clips have to be removed, you will be told who will remove them and where this will be done. It is not uncommon to still experience some pain. Remember that full recovery typically takes three to six months.



Home care

Just before being discharged, you will receive instructions for your at-home recovery. Once you arrive home, one of the first things you should do is call the surgeon and make an appointment for a follow-up visit. Look for any changes around your incision.

Contact your surgeon if you develop any of the following :

1. *Drainage and/or foul odor from the incision.*
2. *Fever (temperature about 101 degrees F or 38 degrees C) for two days.*
3. *Increased swelling, tenderness, redness and/or pain.*



Medication/ Pain control

It is normal for you to have some discomfort. You will probably receive a prescription for pain medication before you go home. If a refill is needed, please call your surgeon's nurse at least five days before you run out of pills. Please contact your surgeon if you have increased discomfort or pain.



Resuming activities

Since recovery is different for each person, your surgeon will inform you when you can resume activities such as returning to work and driving. You may resume sexual activity at any time as long as you keep all hip precautions in mind. It is important to be active in order to control your weight and muscle tone. It generally takes two to three months before you can resume low-impact aerobic activities such as walking, bicycling and swimming. Jogging, high-impact aerobics and certain sports should be avoided. Although your new hip is made of very durable materials, it is subject to wear and tear. The performance of hip replacements depends on age, weight, activity level and other factors. There are potential risks, and recovery takes time. People with conditions limiting rehabilitation should not have this surgery. Only an orthopaedic surgeon can tell if hip replacement is right for you.



Special instructions

It's common for hip replacement patients to visit their surgeon at four to six weeks, three to six months and one year after surgery. Your surgeon may request to see you once a year after the first year, even if you are not having problems.

Any infection must be promptly treated with proper antibiotics because infection can spread from one area to another through the blood stream. Every effort must be made to prevent infection in your implant. Before undergoing any treatment, you should always tell all your doctors (including dentists) that you have a hip replacement.

If you are to have dental work performed, please call your surgeon prior to having this work done. Your surgeon will most likely prescribe an antibiotic for you. Antibiotics must be used before and after any medical or dental procedure—a precaution that must be taken for the rest of your life.



SECTION B



Patients' Experiences [All Ortho Procedures]



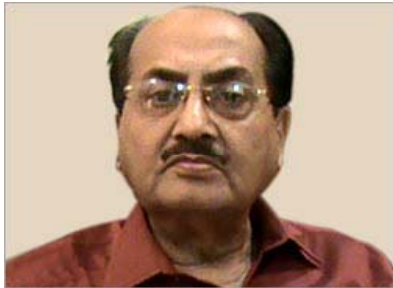
**Maya Ghosh, 66 years
Kolkata**

"I had been suffering from knee pain for last one year. It was difficult to walk. I heard of Dr. Santosh Kumar from my friend and got my knee operated. I now can walk. My friend too is well now. Thanks to Dr. Kumar".



Mr Das, Ulta Danga, Kolkata

Operated for Rheumatoid Arthritis of knee. Total knee replacement done in may 2012. Retired but socially very active, was crippled and home bound, till he started moving out after knee replacement. He says, " it feels as if my age has reduced by 20 years".



Prem Lakhani, 75 years, Kolkata

"I had long knee problem . I consulted Dr. Santosh Kumar. I was operated on 7 Jan, 14, detained in hospital for 4 days and started walking within 4 days. No pain and I am walking almost normally. I am back to normal work. Thanks to Dr"



Parbati Roy, 67 years, Kolkata

"I am 67 year. I have been suffering since 2005 and was under medication. In Oct 2013, I was almost crippled. At this stage, one of my cousins suggested for Dr. Santosh Kumar. He operated my right knee and my left knee was operated in next July. Am fine now"



Sister Jaya, Belle Vue Clinic

"Working as in-charge nurse had become so painful till I saw some operated cases by Dr Kumar and their results at our hospital. I decided to go for Knee Arthroplasty(replacement). Am happy that within a month I joined back my work with confidence."



Mr Banerjee, Beliaghata, Kolkata

An retired footballer says, "knee pain and stiffness had crippled my life in sharp distinction to the joy of playing football in my early age, actually I had suffered from ACL injury which accelerated osteoarthritis. I am happy that the joy of movement has been restored".



Arun Kumar Jana, 71 years

"I have been suffering from knee pain since 2005. I got Dr. Santosh Kumar's contact through internet. He advised for knee replacement. Although I was scared by many, yet Dr. Kumar explained all in details and operated. He and his team had been cooperative".



Prof. Malabika Deb

After the knee replacement, I can climb up the stairs and walk. Feeling much better...



A Patient rides a bicycle with ease after undergoing Knee Replacement by Dr.Santosh Kumar using Orthopilot, an advanced computer navigation procedure.

More Patients Experiences & Testimonials can be provided on request



What The Press Says : Set 1

THE TIMES OF INDIA

21 November, 2013

New surgery boon for knee patients

TIMES NEWS NETWORK

Kolkata: The periods of hospitalization and recovery for knee-replacement surgery patients have come down significantly, thanks to improved techniques and quality implants. Such surgery was conducted on three patients at Belle Vue Clinic on Wednesday.

Earlier, a knee-replacement surgery meant at least six days of post-operative hospitalization and the patient would be able to walk only four days later. But now, patients can stand up within hours of the surgery and start walking on the second day.

While doctors in the city have been performing minimally invasive surgery for quite some time now, minimally invasive computer-assisted total knee arthroplasty was performed on three patients—Sambhunath Bit (52), Meena Devi Chowdhury (65) and Chhaya Chattopadhyay (72)—at Belle Vue on Wednesday.

“Computer-assisted total knee arthroplasty and minimally invasive surgeries have been performed in the city, but independently. Minimally invasive



A patient after surgery

computer-assisted total knee arthroplasty is being done in Belle Vue Clinic for the first time in eastern India,” said Dr Santosh Kumar, who performed the surgery, one of them live, on Wednesday.

The conventional procedure enabled the patient to stand up on the third day of surgery, walk on the fourth day and get discharged from the hospital either on the fifth or the sixth day. But minimally invasive surgery enables the patient to stand within a few hours of the surgery, walk on the second day and walk out of the hospital on the third.

The Telegraph METRO

29th January, 2013

Tech boost for surgery

OUR SPECIAL CORRESPONDENT

Hip and knee replacement surgeries in the city will now be more precise and less risky with a new computer-navigated technique that can tell from outside the exact position of bones and the alignment of ligaments.

Belle Vue Clinic on Monday claimed to be the first in the city to introduce the “fourth generation” machine from Germany.

The new technique will make the surgeries at least 10 minutes longer. “It has more checks and balances and so it takes more than the standard one-and-a-half hours for other

computer-assisted procedures,” said Santosh Kumar, orthopaedic surgeon and head of the joint replacement surgery unit at Belle Vue.

Computer-navigated surgeries have been conducted in Calcutta since 2006, but the German technology promises to increase the accuracy of knee-replacement surgeries from around 80 per cent to up to 95 per cent, say doctors.

The machine maps the position of bones in the knee joint using sensors. These sensors create a detailed image and provide information on a computer screen that help the surgeon install the implant. “The equipment not only

takes into account the bones but also aligns soft tissues like ligaments. So there is less chance of damage to ligaments and other uncertainties too,” Kumar pointed out.

Buddhabeh Chatterjee, orthopaedic surgeon with Apollo Gleneagles Hospitals, said the software would make things easier for surgeons. “Stops like bone registration are not required. Bone registration is a process in which pointers are rubbed on the bones and the images are transferred to the computer through infrared,” said Chatterjee.

He said the software was more precise and therefore better results were expected.

THE ASIAN AGE

21 November, 2013

Advanced knee surgery raises patients' hopes

AGE CORRESPONDENT KOLKATA, NOV. 20

For the first time in eastern India, Minimally Invasive Computer-Assisted Total Knee Arthroplasty (MICA-TKA) surgery was performed on three patients on Wednesday. The knee surgery reduces recovery time for patients.

The surgeries were performed at Belle Vue Clinic under the supervision of Dr Santosh Kumar. Interestingly, the live surgery performed on the knee of 72-year-old Chhaya

Chatterjee was shown on a giant screen at the clinic. It was a unique way to introduce one of the best medical advancements.

This latest (MICA-TKA) procedure enables patients to stand up on his feet on the same day of the surgery, climb the stairs on the second day and are released on the third day. While the conventional procedure takes at least seven days' time for the knee of a patient to function properly.

According to Dr Kumar, the knee transplant is use-

ful for professionals who need a high performing knee.

“The surgery results in fantastic tackling of knee cap bone which leads to improved and full knee bending.”

“With this knee transplant, people now will be able to use public transport, indulge in sports activities and lead a normal life,” said Dr Santosh Kumar, who is also the head of the clinic's Computer-Assisted (Navigated) Joint Replacement Centre.

The Statesman

KOLKATA, THURSDAY 21 NOVEMBER 2013

Urgent joint replacement at prominent city hospital

STATESMAN NEWS SERVICE KOLKATA, 20 November



Good news awaits for people requiring urgent joint replacement and expecting a speedy recovery. The Belle Vue Clinic has introduced a minimally invasive procedure, which would take one-and-a-half hours to conduct knee surgeries and more importantly, the patient would be able stand on his feet on the same day of the surgery.

A team of doctors led by Dr Santosh Kumar, who performed a live surgery before a battery of media persons at the Belle Vue today said: “The minimal invasive technique is less time taking and the patient can stand on his feet on the same day of the surgery and can walk or climb stairs on the second day.”

“The computer assisted

total knee arthroplasty has been done for the first time in the eastern part of the country. Unlike conventional surgeries where the patient takes a longer time to heal, the latest procedure not only saves time, but also leads to a very minimal blood loss,” said Dr Kumar, the head of computer-assisted (navigated) joint replace-

ment centre at Belle Vue. He further said, the transplant costs a little more than Rs 1 lakh and can last for several years. “The treatment is of immense help to those who are at the peak of their professional lives and look for early recovery. They can resume normal life within a few days of surgery.”

THE ASIAN AGE

29th January, 2013

KNEE JOINT REPLACEMENT MACHINE UNVEILED

AGE CORRESPONDENT KOLKATA, JAN. 28

The world's most modern and advanced knee-joint replacement navigation machine,

OrthoPilot, an innovation to make knee and hip surgeries accurate and mathematical was unveiled on Monday at Belle Vue Clinic.

Made in Germany, the

fourth generation machine is said to be the first of its kind in eastern India. Consultant orthopaedic surgeon and head of

KIMS, Hyderabad, Dr Krishna Kiran said: “It's the precision which has enhanced

with OrthoPilot. It is more accurate as machine allows error-free surgery.”

hindustantimes

29th January, 2013

NOW, COMPUTERS AID IN JOINT REPLACEMENT SURGERY IN CITY

HT Correspondent

letters@hindustantimes.com

KOLKATA: Belle Vue Clinic installed ‘orthopilot’, on Monday, the fourth generation navigation system that helps doctors eliminates human errors in hip and knee replacement and corrective surgeries.

“The machine's efficiency is much higher than the devices normally used for knee and hip replacement surgeries. Orthopilot is a hi-tech machine for enhancing precision during surgeries,” Dr Krishna Kiran, director, Institute of Computer Assisted Joint Replacement Centre, Hyderabad, said during the launch of the German-manufactured device.

“Prior to computer-assisted devices, we couldn't be certain that an implant would be placed in the optimal position. It allows easy minimally invasive surgery, decreasing recovery time and post-operative pain,” he said.

The increased accuracy also help increase the life of the implants, while causing less blood loss in the patient. In fact, most patients are able to walk one day after the surgery.

Stating that Orthopilot is a powerful surgical tool that combines dedicated software with superior instrument design, knee

surgeon, said Dr Santosh Kumar, head of the institute of Computer-assisted (navigated) joint replacement centre at the clinic.

“It guides a surgeon to make precise cuts in the joints and remove deformities, by using infrared camera. It gives patient specific information during surgery while virtually eliminating expensive and radiation intensive CT and MRI scans before the surgery,” Dr Kumar added.

THE TIMES OF INDIA

29th January, 2013

Orthopilot for accurate joint surgery

Kolkata: Have someone in your family, who needs to undergo a hip or knee joint replacement surgery? Yes, these surgeries are common in the city now but precision levels depend on the surgeon's eyes. Hence, many patients complain of problems post surgery as the replaced knee is misaligned. So, those asked to go under the scalpel may harbour apprehension after hearing tales of misalignment.

But help is at hand in the form of a computer-guided orthopilot. The fourth generation hip and knee joint replacement navigation machine was inaugurated at the Belle Vue Clinic on Monday. Housed in the hospital's Institute of Computer As-

sisted (navigation) Joint Replacement Centre, the orthopilot is the first in eastern India.

The institute's head, Dr Santosh Kumar, said: “Orthopilot eliminates uncertainty and enhances precision. It also enhances long term results as deviation from goals during surgery is eliminated and the implants survive 1.5 to two times longer.” According to him, a replaced knee under conventional surgery lasts 8-10 years, while one implanted with an orthopilot stays intact for 15-20 years. The costs under both techniques remain around the same—Rs 1.80 lakh. The same surgery costs Rs 15 lakh in Indian currency in the UK, he said.

News About Dr.Santosh Kumar, About Ortho Pilot & Advanced Procedures Done By Him



POORVA ORTHOPAEDIC

What The Media Says – Set 2



आनन्दबाजार पत्रिका

21 November, 2013

हाट्टर चिकित्सा। कम्पिउटारेंर साहाय्ये सामान्य काटाछेड़ाय हाट्टर प्रतिस्थापनेर नतुन यज्ञ उद्घोषण हल। बुधवार, बेलभिट्टी नार्सिंहहोमे। नार्सिंहहोमेर जयेन्ट रिप्लेसमेन्ट केन्द्रेर प्रधान चिकित्सक सन्तोष कुमार यज्ञट्टर साहाय्ये ए दिनई हातेबलमे हाट्टर प्रतिस्थापन करे देधान। परे सांवादि क सम्मेलने तनि बलेन, “प्रथागत अस्त्रोपचारेंर अन्त तिन दिन परे रोगी निजे दाँडाते पारेने। ए फ्रेक्त्रे अस्त्रोपचारेंर दिनेई रोगी दाँडाते पारेने। तृतीय दिने तौर हासपाताल थेके छूटि हये यय। ए फ्रेक्त्रे काटाछेड़ा, रक्तस्फरण अनेक कम। चिकित्सा खराचो कम।”

এই সময়

বৃহস্পতিবার ২১ নভেম্বর ২০১৩

হাটু প্রতিস্থাপনের দিনেই চলাফেরা

এই সময়: হাটু প্রতিস্থাপনের ছ' ঘণ্টা পরই রীতিমতো হাটতে শুরু করলেন রোগী। কল্পনা নয়। বাস্তবেই এমন অভিনব অস্ত্রোপচার সম্ভব হল খাস কলকাতায়। সেই রোগীকে বুধবার সংবাদমাধ্যমের সামনে এনে হাসপাতাল কর্তৃপক্ষের দাবি, পূর্ব ভারতে এমন অস্ত্রোপচারের নজির এই প্রথম। চিকিত্সকরা জানাচ্ছেন, দু' দিন পর তাঁকে ছেড়েও দেওয়া হবে হাসপাতাল থেকে। সৌজন্যে, 'মিনিমালি ইনভেসিভ কন্পিউটার অ্যাসিস্টেড নি ট্রান্সপ্লান্ট'। সহজ বাংলায়, কন্পিউটারের সাহায্যে নামমাত্র কাটাছেড়া করে অপারেশন। এ দিন বেলভিউ ক্লিনিকে দুই রোগীর এমনই অস্ত্রোপচারের সাহায্যে হাটু প্রতিস্থাপন করা হয়। সকালে যার অপারেশন হয়েছিল, তিনি বিকেলেই হাটাচলা শুরু করেন। বিকেলে যার প্রতিস্থাপন হয়, তিনি আজ, বৃহস্পতিবার সকাল থেকে হাটতে পারবেন বলে দাবি বিশেষজ্ঞ ট্রান্সপ্লান্ট সার্জনে সন্তোষ কুমারের। তিনি বলেন, কৃত্রিম হাটুটি মালাইচারিক পিছনে বসানোর সময়ে, 'অর্থো-পাইলট' নামে একটি কন্পিউটারের সাহায্য নিয়ে খুব অল্প কাটাছেড়া করা হয়। ফলে, এই অস্ত্রোপচারে দ্রুত সেরে ওঠেন রোগী। অপারেশনের তিন-চার দিনের মধ্যে স্বচ্ছন্দে বাড়ি চলে যেতে পারেন। প্রচলিত প্রথায় তিন দিনের আগে হাটুটি সম্ভব হয় না। নতুন পদ্ধতির এই অস্ত্রোপচারের খরচ একই বলে জানিয়েছেন বেলভিউ কর্তৃপক্ষ।

सन्मार्ग

॥ सन्मार्ग एव सर्वत्र पुण्यते नाथः क्वचित् ॥
गुरुवार, 28 नवम्बर 2013, वर्ष 68, अंक 217, पृष्ठांक 23553

घुटनों की तकलीफ दूर करें महज एक ऑपरेशन



जयपुरा - फिनिया, वीटुन - जुदना, हर काम करना सबको बहुत परदा आता है, पर उस के साथ और कई अन्य कार्यों की वजह से हमारे दैनिक जीवन में कई सारे परेशानियां आने लगती हैं। न हनु वीक से चल पाते हैं और न ही अन्य काम कर पाते हैं। ये परेशानियां दिन-प्रतिदिन बढ़ती ही जाती हैं। तक के साथ आरकल तकनीक में बहुत सारे परिवर्तन आ रहे हैं। आज हर काम अब से अब से कम खर्च में करने की कोशिश की जाती है। घुटने की तकलीफ को वही कम कर सका है, जिसने दर्द को ठेका ही था उसके बिल्टी अपने ही इस दर्द को ठेका ही। बेल व्यू अस्पताल ने हाल में ही एक नवी तकनीक को वही परिचित कराया है। अन्य तरह से फिनिये नई ऑपरेशन में रोगियों को कम से कम पीस दिव खड़े होने में ला जाते हैं, चौथा दिन चलने - फिनिये में लगता है। पांचवें और छठवें दिन में उसे अस्पताल से छुट्टी मिलती है। Minimally invasive computer assisted total knee arthroplasty surgery द्वारा आय विम हीन ऑपरेशन कराते हैं, उसी दिन आय अपने पैरों पर खड़े हो सकते हैं। सोईथों पर चढ़ना -उतारना भी आय दूसरे दिन से शुरू कर सकते हैं। ऑपरेशन के तीसरे दिन ही आरकल अस्पताल से छुट्टी मिल सकती है। सारे ऑपरेशन ड्राइव संवीध की देखरेख में हुए।

दैनिक जागरण

29th January, 2013

बेलव्यू में आर्थोप्लास्ट मशीन



मशीन का उद्घाटन करते बेलव्यू के रोगी और डॉक्टर।
आधुनिक युगका हवा। उच्चतरिय कम्यूटर आधारित यह मशीन घुटना प्रत्यारोपण ऑपरेशन में चिकित्सक को अतिथी के सही दिशा में सॉटिंग को नेविगेट करने में मदद करती है। इस मीके पर मौजूद जर्मनी की घुटना प्रत्यारोपण विशेषज्ञ डा. सन्तोष कुमार ने कहा कि चौबी पीडी की सर्जरी में प्रीसिजन सबसे अहम है। गाई ने कहा कि घुटने या आइड के प्रत्यारोपण के बाद उसके सही व सटीक एक्सिस पर काम करना ही ऑपरेशन की सफलता है। देश के प्रमुख घुटना प्रत्यारोपण चिकित्सक डा. कुशाकिरा जो अनेक लाइव सर्जरी कर चुके हैं, ने कहा कि यह एक ऐसी प्रक्रिया है जिसमें घुटने की उमह ठूला घुटना 'मैमॉन्टिकन प्रत्यारोपण' की तरह फिट हो जाता है। आर्थोप्लास्ट मशीन मूल रूप से इमेजिंग डिटेक्टर आधारित है। उद्घाटन समारोह में मौजूद बेलव्यू के रोगी और डॉक्टर कई प्रमुख चिकित्सक मौजूद थे।

प्रतिदिन

23 November, 2013

बेलभिट्टी क्लिनिके हाट्टर अ्यास्त्रोप्लास्टि

हाट्टर समया समाधाने नतुन दिगुत बेलभिट्टी क्लिनिके। सन्प्रति अथाने चाल हल कन्पिउटार परिचालित हाट्टर अ्यास्त्रोप्लास्टि। सबचेये उमम चिकित्सा पद्धतिर मध्या दिये रोगीदेनेर এই परिषेवा देओया हवे बले जानियेछेन बेलभिट्टी-एर हाट्टर प्रतिस्थापन विभागेर प्रधान डा: सतोष कुमार। डाक्टरदेनेर दाबि, साधारणत हाट्टते अस्त्रोपचारेंर परे तिनदिनेर मध्या रोगी निजेर पाये दाँडाते पाये। हाट्टते पाये चारदिनेर दिन। किञ्च हाट्टते अ्यास्त्रोप्लास्टि परे अस्त्रोपचारेंर दिनेई रोगी उठे दाँडाते पावे। काजे योण दिते पावे कयेकदिनेर मधे। एमनकी अ्यास्त्रोप्लास्टि समय रक्तपातओ तुलनाय अनेक कम हय।

परिका

कोलकाता . शुक्रवार . 22.11.2013

घुटने की सर्जरी अब और सहज



कोलकाता, आधुनिक तकनीक तथा कम्यूटर की मदद से घुटने की सर्जरी अब और सहज हो गई है। सर्जरी के बाद मरीज को ज्यादा दिना तक अस्पताल में रहना भी नहीं पड़ेगा।
डा. संतोष कुमार के नेतृत्व में बेल व्यू क्लिनिक में मिनिमली इन्वेसिव, कम्यूटर-एसिस्टेड-टोटल की ऑपरेशन की गई है। उन्हीने बताया कि पूर्वी भारत में पहली बार यहां इस तरह की सर्जरी की शुरूआत हुई है। सर्जरी के कुछ घंटे बाद मरीज अपने पैरों पर खड़ा हो सकता है। दूसरे दिन कुछ काम कर सकता है। तीसरे दिन उसे अस्पताल से छुट्टी दी जा सकती है।
बेल व्यू क्लिनिक में मरीज के साथ डॉ. संतोष कुमार।

News About Dr.Santosh Kumar, About Ortho Pilot & Advanced Procedures Done By Him in TV & Press

जनसत्ता

29th January, 2013

बेलव्यू में घुटना प्रत्यारोपण की नई तकनीक

कोलकाता, 28 जनवरी (जनसत्ता)। महानगर कोलकाता के बेलव्यू क्लिनिक में नई व अत्याधुनिक तकनीक वाली एडवेंस कम्प्यूटर सहाय्य-आय घुटना व काम (नी एंड हिप रिप्लेसमेंट) प्रत्यारोपण शुरू की गया है। सोमवार को इसकी शुरुआत हुई। इस मीके पर नेतृत्व क्लिनिक के रीडिंग वी टंडन, डॉ. कुशाकिरा, डॉ. विनीत कुमार मजुमदार, डॉ. संतोष कुमार जैसे अग्रणी डॉक्टर उपस्थित थे। बाद में टंडन ने परकारों की भाषा कि उन्हीने यह नई तकनीक मंगाई गई है। कोलकाता के किसी अस्पताल में यह तकनीक नहीं है। उन्हीने बताया कि बेलव्यू में हर नई पीढ़ी से चालीये घुटने या हिप काम का प्रत्यारोपण होता था। नई तकनीक के आने से इसमें त्रुटि ज्यादा नहीं आ पाती। उन्हीने बताया कि छठ दिने की पीर मरीज स्वयं होकर चलने-फिनिये लगता।

वर्तमान

29th January, 2013

नि, हिप रिप्लेसमेंटो मुशकिल आसान 'अर्थोपैलिट' चालु हल बेलभिट्टीते



हिप सर्जरी, कलकाता में बेल व्यू क्लिनिके।
चिकित्सक को अतिथी के सही दिशा में सॉटिंग को नेविगेट करने में मदद करती है। इस मीके पर मौजूद जर्मनी की घुटना प्रत्यारोपण विशेषज्ञ डा. सन्तोष कुमार ने कहा कि चौबी पीडी की सर्जरी में प्रीसिजन सबसे अहम है। गाई ने कहा कि घुटने या आइड के प्रत्यारोपण के बाद उसके सही व सटीक एक्सिस पर काम करना ही ऑपरेशन की सफलता है। देश के प्रमुख घुटना प्रत्यारोपण चिकित्सक डा. कुशाकिरा जो अनेक लाइव सर्जरी कर चुके हैं, ने कहा कि यह एक ऐसी प्रक्रिया है जिसमें घुटने की उमह ठूला घुटना 'मैमॉन्टिकन प्रत्यारोपण' की तरह फिट हो जाता है। आर्थोप्लास्ट मशीन मूल रूप से इमेजिंग डिटेक्टर आधारित है। उद्घाटन समारोह में मौजूद बेलव्यू के रोगी और डॉक्टर कई प्रमुख चिकित्सक मौजूद थे।

We accept Cashless Medclaim

#	Name
1	Apollo Munich Insurance Co Ltd
2	Max-Bupa Health Insurance Co Ltd
3	Star Health and Allied Insurance Co. Ltd.
4	Life Insurance Corporation of India
5	Aviva Life Insurance
6	Birla Sun Life Insurance
7	Bajaj Allianz Life Insurance Co Ltd
8	Bharti AXA Life Insurance Co Ltd
9	HDFC Standard Life Insurance Company Ltd.
10	ICICI Prudential Life Insurance Co. Ltd.
11	IDBI Fortis Life Insurance Co, Ltd.
12	Max New York Life Insurance Co. Ltd.
13	MetLife India Insurance Co. Ltd.
14	Reliance Life Insurance Co. Ltd.
15	SBI Life Insurance Co. Ltd.
16	Star Union Dai-ichi Life Insurance Co. Ltd.
17	TATA AIG Life Insurance Co. Ltd.
18	Bajaj Allianz General Insurance Co Ltd
19	Bharti Axa General Insurance Co. Ltd.
20	Cholamandlam MS General Insurance Co. Ltd
21	Future Generali India Insurance Co.Ltd.
22	HDFC Ergo Genral Insurance Co Ltd
23	ICICI Lombard General Insurance Co. Ltd.
24	IFFCO Tokio General Insurance Co. Ltd.
25	National Insurance Co Ltd
26	Reliance General Insurance Co. Ltd.
27	Shriram General Insurance Company Limited
28	Royal Sundaram Alliance Insurance Co. Ltd.
29	Tata AIG General Insurance Co Ltd
30	The New India Assurance Co. Ltd.
31	The Oriental Insurance Co. Ltd.
32	United India Insurance Co. Ltd.
33	Universal Sompo General Insurance Co. Ltd



Almost All Insurance Companies & Majority of TPAs Accepted By Us



Consult the Doctor via Online or Video Conference

Dr. Santosh Kumar is available for video conference with the patients for better understanding between the patient and the doctor. What you need to do is to fill in the form in the website [format given below] and submit. You will be intimated duly over phone/through mail the date and time for video conference.



You need to have Skype (free software for video conferencing) downloaded in your computer. Now add Dr. Kumar in the contact with his ID, E-mail and Phone No that will be communicated to you. You should have a web camera attached to your computer. You can interact with the doctor at the pre appointed date and time.

* Name :	<input type="text"/>
* Address :	<input type="text"/>
* City :	<input type="text"/>
* Pincode :	<input type="text"/>
* Phone :	<input type="text"/>
* E-mail :	<input type="text"/>
* Why do you want to go for video conferencing with the doctor :	<input type="text"/>
<input type="button" value="Submit"/>	<input type="button" value="Reset"/>



For Outstation Patients

If you reside outside of Kolkata, you can contact us in either of these ways :



Online Consult with Doctor.

Please check our website for details



Video Conference with Doctor

Kindly go through the Video Conference page



Tele Consult with Doctor

Please call the Helpline numbers



Meet Doctor In Person.

Before surgery / procedure, do meet the Dr in person once.



Patient's Suite / Room

Patient can choose either Suite or Normal room



Treatment Centre Location

This is situated at the heart of Kolkata city



Guest Suite / Room [Family members / Friends accompanying the Patient can choose to stay at this Star Hotel situated adjacent to the Treatment Centre : as per their budget / preference]





For Communities & Institutions

For The Kind
Attention Of

- Hon. President / Secretary
- Admin. Dept. / Committee Heads
- Medical Officers / Office Bearers / Volunteers Of :

Government /
Para Govt. Bodies

NGOs / Voluntary Organisations

Schools / Colleges / Universities

Educational / Research
Institutions

Housing Societies / Residential
Colonies

Senior Citizens' Groups / Old
Age Homes

Sports Bodies / Sports Training
Institutions

Group of Children / Persons With
Special Needs [Orthopaedic]

We can help you or involve with your organization in any the following ways :

Group Health Checks Ups for
your members

Health Education Programs,
Seminars for your members

Special Health Cards / Packages
for members

Concessions in Procedures /
Implants / Doctor Fees

Please Call : +91 98319 11584 For Tieup / Health Program
Or Email : santdr@gmail.com





For Corporate Clients

For the Kind
Attention Of

- **CMOs [Chief Medical Officers]**
- **HR / PMIR / Admin. Heads**
- **VP / Centre / Divisional Heads**
- **CEOs / Directors / Management**

By having a Corporate Tieup with us, You & Your employees can have the following benefits :

Concession in Treatment	Employees Health Screening	Employees Health Talk / Seminar	Pre Approved Treatment Loan	Exclusive Package For Employees
On-Site Health Checkup	Corporate Health Desk Setup	Ortho Panel Membership	Reimbursement Facility	Priority Treatment Facility
Corporate TeleHealth Clinic	Corporate Medi Tourism Facilitation	Liaison Office / Ortho Concierge	Ortho Health Tele Triage	Health Education via Corp. Intranet

Please Call : +91 98319 11584

For Corporate Tieup / Program / Panel Membership

Or Email : santdr@gmail.com



For Medical Tourists

As India is a leader in Medical Tourism, you can get the following benefits while taking treatment with us :



**HIGH QUALITY
TREATMENT**



**MASSIVE
SAVINGS**



**ENGLISH SPEAKING
DESTINATION
MANAGER**



**LOAN
OPTIONS**
Conditions apply



**PASSPORT-VISA
ASSISTANCE**



**WARRANTY
OF IMPLANT**



**PRE & POST
SURGERY CARE**



**SUITABLE
PACKAGES**



**DIRECT
CONSULTATION
WITH DOCTORS**

Kolkata is 3rd largest metro in India & one of the largest in Asia. Meditourism is flourishing here with patients from all over the world including USA, UK, Australia, Europe, Gulf, African & surrounding Asian countries.



Please Call : +91 98363 65632
International Patient Manager / Co-ordinator
Or Email : santdr@gmail.com

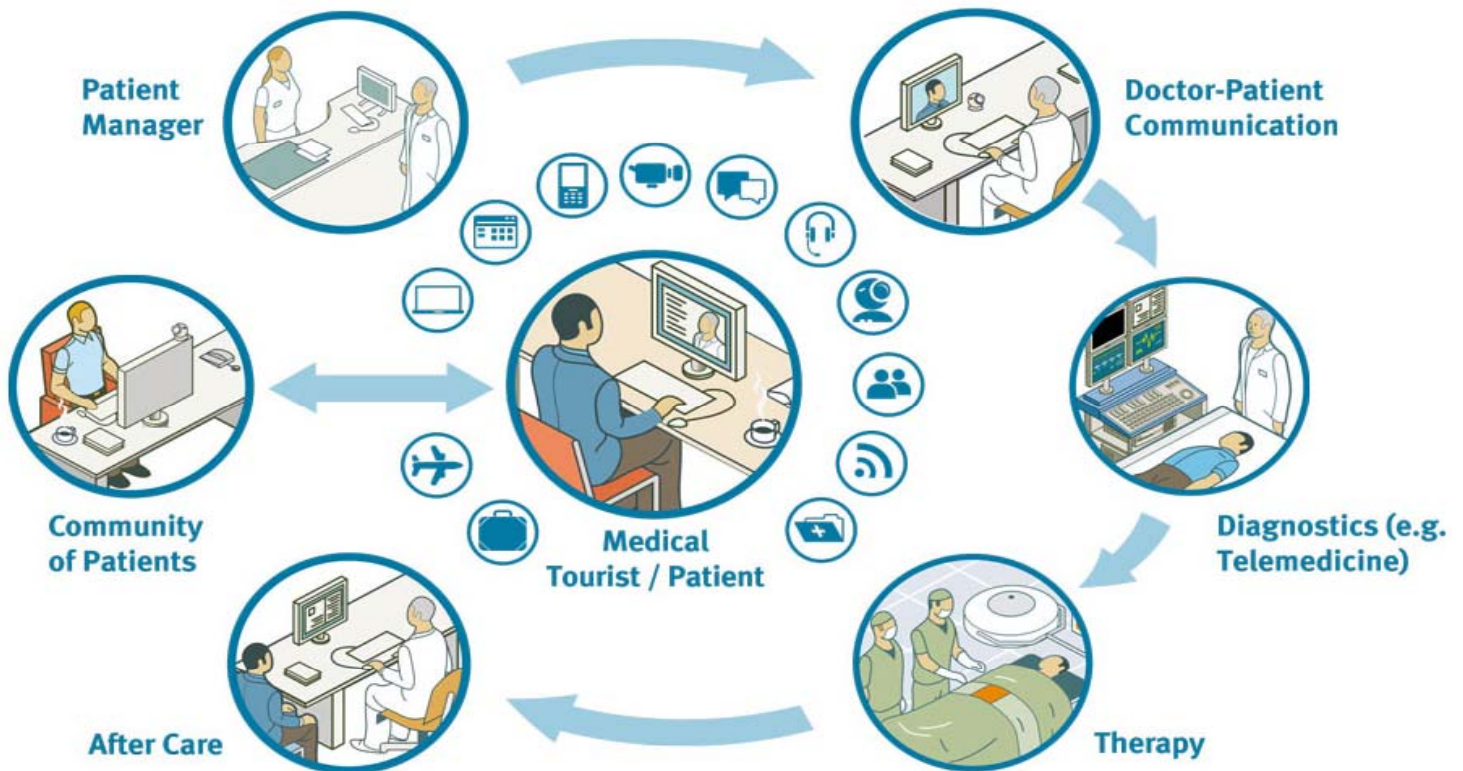


POORVA ORTHOPAEDIC



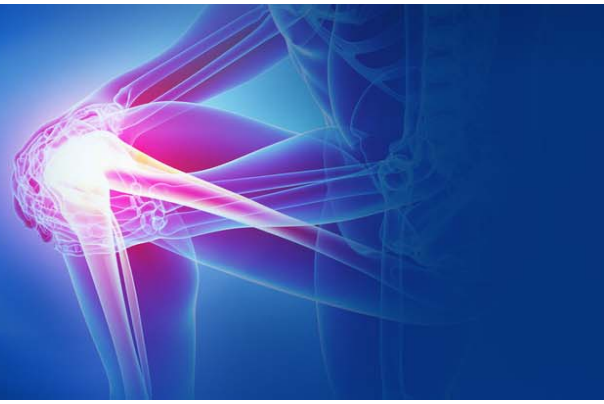
For International Patients

If you reside outside India, you can contact our Patient Relation Manager who will guide you through these process to make your treatment comfortable.



Please Call : +91 98363 65632
International Patient Manager / Co-ordinator
Or Email : santdr@gmail.com





The Fees

For Consultation
In Person / Visit

- Rs 800 INR
- \$ 13 [US Dollars]

For Consultation
With Digital X-Ray

- Rs 1,000 INR
- \$ 16 [US Dollars]

For Video Conference
With Doctor

- Rs 600 INR
- \$ 10 [US Dollars]

For Tele
Consultation

- Rs 300 INR
- \$ 5 [US Dollars]

For Special
Consultation

- Rs 100 INR
- \$ 2 [US Dollars]

For Charitable Purpose. Only 5 Patients / Day. With Prior Appointment.

For Online
Consultation

- FREE
- \$ 0 [US Dollars]

Via Email.
Will be Co-ordinated with Patient Relations Manager

For Group
Consultation

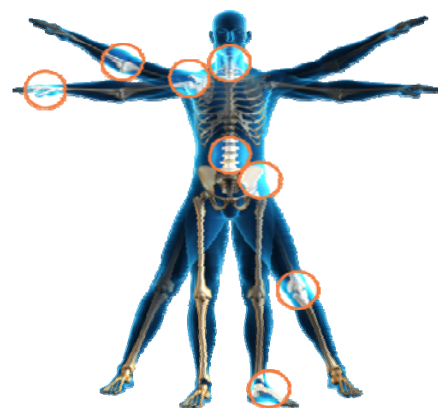
- As Per Case
& No. of Patients

For Communities /
For Charitable Groups /
For NGOs / VOs / Etc

Please Call : +91 98363 65632 [Patient Relations Manager / Co-ordinator]
Or Email : santdr@gmail.com



About the Foundation



The poorva international orthopaedic foundation based in kolkata India was founded to be the voice of people for bone and joint health in Eastern India.

It was founded by Dr Santosh kumar an eminent and leading joint replacement surgeon in the country with an expertise of more than 5000 joint replacement surgeries.

What is the poorva international orthopaedic foundation?

It is not a hospital but it's a team of professionals and doctors who are committed to bring the world's most advanced and effective technology in joint replacement, and spine surgery to eastern india at the most cost effective and economical rates to make it reach the most needed.

Thus it brings the most advanced bone and joint treatment to external India at the most affordable prices so that the technology and science reaches all those who need it.

Dr Santosh kumar, President of poorva international orthopaedic foundation, pioneers the use of computer assisted minimally invasive knee replacement surgery in eastern india. He has been using the fourth generation computer assisted technique for knee replacement.

Also he and the team at poorva ortho has done enormous work on high flexion knee replacement which can allow people to do unrestricted walking, stairs climbing, cycling, driving and sitting cross legged on bed.

The team of poorva orthopaedic foundation has been using ultrasound guided nerve blocks to make knee replacement surgery absolutely painless . Painless knee replacement surgery allows for accelerated recovery.

Also they have formed a fully equipped team of medical profession and intensivists and cardiologists and to tackle any medical issues in a patient undergoing joint replacement. This is to make safety of people undergoing joint replacement a priority.

Poorva orthopaedic foundation has been instrumental in training young surgeons who come from various parts of the country to be trained under the supervision of Dr Santosh kumar.

The foundation offers fellowship in joint replacement to young surgeons under the supervision of Dr Santosh kumar.

The foundation conducts various free consultation camps, patient awareness programmes and workshops. Also poorva international orthopaedic foundation has been pioneering Digital consultation and online seminars and webinars for patient awareness and surgeon education.



eBOOK DISCLAIMER

1. This ebook is not intended as a substitute for the medical advice of physicians. The reader should regularly consult a physician in matters relating to his/her health and particularly with respect to any symptoms that may require diagnosis or medical attention.
2. Any trademarks, service marks, product names or named features are assumed to be the property of their respective owners, and are used only for reference. There is no implied endorsement if we use one of these terms.
3. The author / publisher of this Ebook and the accompanying materials have used their best efforts in preparing this Ebook. The author / publisher make no representation or warranties with respect to the accuracy, applicability, fitness, or completeness of the contents of this Ebook. The information contained in this Ebook is strictly for educational purposes. Therefore, if you wish to apply ideas contained in this Ebook, you are taking full responsibility for your actions.
4. The eBook has been circulated to a limited group of private readers at free of cost. There is no commercial gain by way of sale of book.
5. Every care has been taken to prevent copyrighted images / contents from appearing in the ebook. But if by chance any minute part of the content had appeared without our knowledge, kindly notify us if you are the rightful owner. We shall have them removed immediately.
6. The author and publisher shall in no event be held liable to any party for any direct, indirect, punitive, special, incidental or other consequential damages arising directly or indirectly from any use of this material, which is provided “as is”, and without warranties.
7. Also, you should use this information as you see fit, and at your own risk. Your particular situation may not be exactly suited to the examples illustrated here; in fact, it’s likely that they won’t be the same, and you should adjust your use of the information and recommendations accordingly.





**POORVA INTERNATIONAL
ORTHOPAEDIC FOUNDATION**



Connect with us

Call : +91 98363 65632

Mob : +91 98319 11584

Email : santdr@gmail.com

Visit : www.mykneemylife.org

Consult :

Ortho Dept., Belle Vue Clinic,
7 Loudon Street, Kolkata 700 017, West
Bengal, India

Regd. Office : Beliaghata, Kolkata 700 010