

## Frequently Asked questions:

### Is robotic surgery really better than conventional knee replacement surgery?

When compared to conventional manual knee replacement surgeries, robotic knee replacement has got a lot of advantages in terms of better implant positioning, precise surgical bone cuts, least human intervention, faster recovery and least hospital stay. Considering its minimally invasive nature, it causes lesser tissue trauma and thus less blood loss and faster recovery.

### Is there any risk associated with robotic knee replacement surgery?

Advanced robot like CUVIS Joint have best in class safety features and do not cause any additional risk to patients undergoing knee replacement surgeries. With advanced features like Bone Movement Monitoring and Haptic Feedback mechanism, it monitors everything in real time. Thus, it delivers best surgical outcome with maximum safety to the patients.

### Are all the robots for knee replacement same?

Even though robotic technology for knee replacement is the most advanced therapy option in today's scenario, there are different types of robots available in market. Amongst all, CUVIS Joint is the only robot which is autonomous in complete sense. Other options of robot just act as a guiding system for surgeon and thus possess the risk of intra-operative human errors. These systems are called as passive or semi-active, whereas CUVIS Joint is of active nature.

### How many days do I spend in the hospital?

Three to Four days For a single TKR.

### IS THIS OPERATION PAINFUL?

Any operative procedure will lead to post-operative pain. With use of drugs infiltrated at surgical site during surgical procedure we aim to make post-operative pain minimal. Your pain will be kept under control by team of pain management consultants.

### WHEN CAN I RESUME MY DAY TO DAY ACTIVITIES?

Your progress after going home will be roughly as follows : After going home on the 4th day after surgery you will be advised to walk in the house for 4-5 times a day. The stitches on the operative wound will be removed 14-16 days after surgery . Other activities like swimming , driving a car or a two wheeler and kitchen work are permitted after 4- 6 weeks.

### When can I travel?

You can take short flight, 4 days post surgery, long flight, long flight can be taken 15 days after surgery.

### Which precautions should I take to protect my new artificial joint?

You should avoid sitting on floor. You may sit cross legged, but on a bed or on a higher level surface.

## TOTAL HIP REPLACEMENT

Total hip replacement is required in hip arthritis. Hip arthritis can be due to rheumatoid arthritis, avascular necrosis of femoral head and post-traumatic arthritis.

### Surgery :

In total hip replacement damaged acetabulum surface is replaced with acetabulum cup and cup has liner of ceramic. Femur head (Hip ball) is replaced with femur implant which also has ceramic coating. Depending on your bone condition cemented or un-cemented hip implant will be used. Normally in young patient un-cemented total hip replacement is performed.

### Pain control after surgery :

With use drugs infiltrated at surgical site during surgical procedure we aim to make postoperative pain minimal.

### Precautions after surgery :

You are supposed to avoid squatting and avoid jumping from heights.

### WHEN CAN I RESUME MY DAY TO DAY ACTIVITIES?

You will be allowed to walk on same day of surgery.

Your hospital stay will be for 3 to 4 days.

During hospital stay you will be demonstrated which hip and knee exercises you have to perform on daily basis. Your progress after going home will be roughly as follows After going home on the 4th day after surgery you will be advised to walk in the house for 4-5 times a day.

The stitches on the operative wound will be removed 14-16 days after surgery . Kitchen work or household work can be started after 20 to 25 days post surgery. Other activities like driving a car or a two wheeler is permitted after 4-8 weeks.

# ROBOTIC JOINT REPLACEMENT

Operated By Robot And AI



- India's First Fully Autonomous ROBO
- 100% Precision in Surgery



## HELIOS ORTHOJOINT

Unit No. 405, 4th Floor, Shree Ganesh Ace Arcade,  
S.No. 6/1B, Near Kokane Chowk, Pimple Saudagar,  
Pune - 411017. Email : heliosorthojoint@gmail.com  
Web : www.heliosorthojoint.com / www.dr.saurabhgiri.com  
Mob : 9766601146 / 9156580303



## HELIOS ORTHOJOINT

- 🌐 [www.heliosorthojoint.com](http://www.heliosorthojoint.com)
- 🌐 [www.dr.saurabhgiri.com](http://www.dr.saurabhgiri.com)
- ✉ [heliosorthojoint@gmail.com](mailto:heliosorthojoint@gmail.com)

📞 9766601146 / 9156580303

Dr. Saurabh Giri is One of the Experienced & Leading Joint Replacement and Arthroscopy surgeon Practicing in Pune and PCMC. He is currently working as Head of Department Robotic Joint Replacement at Deccan Hardikar Hospital & Head



of Department Orthopaedic & Robotic Joint Replacement at Accord Hospital. He is also visiting consulting at ONP Prime Hospital & Sahyadri Hospitals. He has vast experience of 14 years and has experience of working at two international hospitals which includes Santo Spirito hospital Italy and Helios Endo Klinik Germany. Dr Saurabh has also worked as a consultant Orthopaedic surgeon at some of India's big hospitals for Orthopaedic surgeries like Mewar Hospital Udaipur, Shalby Hospital and at Deenanath Mangeshkar Hospital. He has completed MS orthopaedic from a central institute. He was University topper and has received Gold medal for MS Orthopaedic. He has experience of performing more than 6000 surgeries under his belt.

He has received prestigious SICOT fellowship in Hip and Knee arthroplasty (Joint Replacement), at Rome Italy. During this fellowship he has mastered the art of performing Hip arthroplasty using direct anterior approach and using short stem for Hip arthroplasty which are highly advanced techniques. He has also received fellowship in Revision surgery in Hip and knee arthroplasty from Helios Endo Klinik, Hamburg, Germany. He has given many national and international presentations on topics related to Knee Joint Replacement, Knee Arthroscopy and Orthopaedics. His expertise includes knee replacement surgery, hip replacement surgery, knee arthroscopy, pelvis and acetabulum surgery. Dr. Saurabh Giri is known for compassionate care and excellent results which he delivers to his patients.

## ARTHRITIS

A joint is the area where two bones meet and it has covering capsule. Arthritis is inflammation of joint. The commonest form of arthritis is osteoarthritis which is wear and tear of the cartilage and bones. The second common cause of arthritis is rheumatoid arthritis. Once the cartilage cushion gets damaged, bones surfaces come in contact and as a result pain is the major symptom. If arthritis becomes severe then it results into deformity and reduction in mobility.

## ROBOTIC KNEE REPLACEMENT (India's first fully Autonomous AI Powered Robo)

As my experience grew in the field of joint replacement I have learned that every patient is unique, no two patients are same. Each individual has different needs and each come in different age, shape and sizes. Every patient I have treated has helped me to evolve and become better joint replacement surgeon. Considering this philosophy I have decided with shift to CUVIS Robotic knee replacement surgery. In Cuvis robotic knee surgery we do pre-operative CT scan of patient, this CT scan helps to identify patient specific bone details and then surgical plan is developed according to patient bony details. Doing this before surgery planning help us to achieve precision in bone cutting and in selection of patient specific implants.

### What is Robotic knee replacement:

In Robotic Total Knee Replacement procedure, a robot is used to take required surgical bone cuts and also to define soft tissue tension. Considering the superiority of this technology, one can surely expect the best post-surgical outcomes with robot i.e. CUVIS Joint as against manual way of surgery.

Standard robotic knee replacement with CUVIS Joint typically comprises of:

- In-clinic Diagnosis
- CT-Scan
- Pre-surgery Planning (Virtual Simulation)
- Autonomous Robotic Surgical Procedure
- Discharge from Hospital

When compared to conventional manual surgical procedure, robotic knee replacement has a lot of benefits on offer like:

- Best post-surgery results
- Patient specific i.e. personalized pre-surgery planning
- Maximum surgical accuracy
- Minimally invasive nature – lesser blood loss and associated pain
- Faster recovery with lesser hospital stay required.
- Minimal incision is given.
- Surgical time is kept minimal.
- Pain control is done with local infiltration of drug at time of surgery.
- Minimal drugs are used.
- Patient can walk within few hours of surgery.
- Blood loss and stress on patient body is reduced.

### After Surgery :

You will be assisted to sit up about an hour after surgery. You will be encouraged to walk 4-6 hours after surgery. You will be assisted to stand and start walking with walker on same day of surgery. This is all possible with use of robotic surgery as soft tissue handling and incision is kept minimal also use of local infiltration of anaesthetic agent at time of surgery.

### DAY 2

On day two you will be demonstrated exercises which includes knee cap tightening and loosening, ankle and toe movements. Knee range of movements will be started. You must do these exercises 15-20 times every hour. This will help to mobilise your knee.

### DAY 3

Knee bending exercises will be increased. During the day you will be walking 3-4 times with walker. Once you gain your confidence you will be demonstrated how to walk up a staircase. You will be allowed to do the exercise by yourself. You will be allowed to sit on chair.

### Important advice:

You must not keep pillow or towel under the operated knee, this is to prevent flexion deformity of knee. To prevent knee deformity put one or two pillows under the lower 1/3rd of leg so that knee hangs in mid air and there is no pressure over heel area.