

# Rotationplasty

## ***What is a Rotationplasty?***

Rotationplasty is a surgical option for treatment of bone tumors of lower limb. It is a procedure which makes the ankle joint to substitute and function as knee joint after 180 degree rotation of the limb. It is a semi-ablative procedure i.e. it is somewhere in the middle between complete amputation and complete preservation of the limb. The surgeon neither cuts off the limb nor completely preserves it. The limb gets shorter after surgery and the ankle joint of the operated extremity lies at the level of opposite leg's knee joint. The foot faces backwards instead of forwards.

## ***How does the leg look after surgery?***

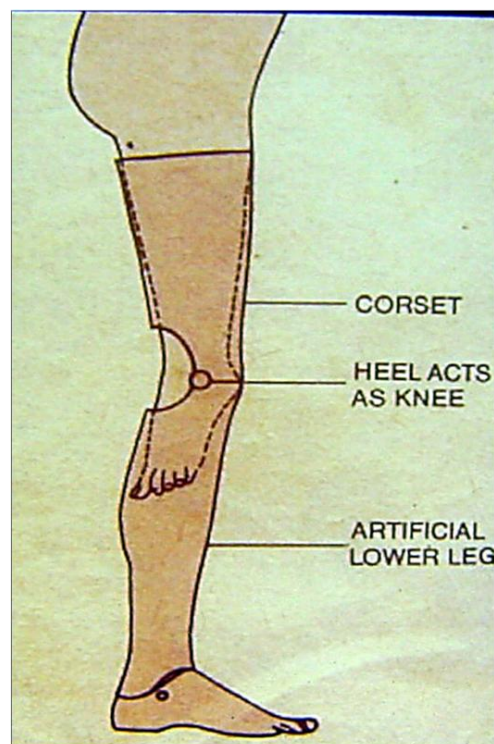


### ***Why does surgeon need to rotate the leg?***

The intension of surgery is to make the ankle work as knee joint. The axis of knee and ankle are in diagonally opposite directions. After 180 degrees rotation, ankle dorsiflexion becomes knee flexion and ankle planterflexion becomes knee extension. Once the patient is wearing prosthesis, one can not make out the deformity. The heel gives impression of patella (knee cap).

### ***When is the prosthesis fitted and how does the leg look after prosthesis fitment?***

Once bony union is achieved, this limb is fitted with prosthesis which takes around 3 months from surgery. The ankle joint powers this prosthesis functioning as the knee joint. Limb control and gait training is started subsequently. During the three months prior to prosthesis fitting, regular physiotherapy is ensured to maintain good range of movement of the ankle.





***What is the cost of prosthesis?***

The locally manufactured prosthesis costs between Rs.7500=00 and Rs.15000=00. The imported prosthesis costs around Rs.50000=00. There is a lifetime warranty for maintenance and repair.

***What is the likely expenditure for this surgery?***

This surgery is being done at “The Gujarat Cancer & Research Institute” very regularly. The total expenses should not exceed Rs.15000=00 to Rs.20000=00 at GCRI.

***What are the advantages of rotationplasty?***

- It gives the patient a mobile & durable knee joint.
- The gait of patient is better than the patient with amputation.
- It is more energy efficient. The patient does not get tired even after walking considerable distance.
- Patient bears weight on his/her own sole. So, patient does not realize that the foot is facing backwards and not forwards.
- The procedure compensates for limb length discrepancy – very useful in growing children
- Usually a single procedure – no revisions
- Excellent oncologic clearance, i.e. the cancer can be removed very well without leaving any cancer cells in the body.
- Radiated cases, cases with bad biopsy or surgical scars and infection can also be considered for rotationplasty.
- Even if the blood vessel is inside the cancer, this surgery is feasible.
- Its function is comparable to joint replacement and superior to above knee amputation.

***What are the disadvantages of rotationplasty?***

- Patient and relatives have to except the look of limb after surgery.
- Patient has to wear artificial leg life long.

***For further information please contact:***

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