

Knee Replacement

Indications

- The main indication for replacement is pain especially if combined with deformity and instability.



Types of replacement

- 1-partial replacement, the role of unicompartamental replacement has yet to be firmly established. Following a successful operation, relief of pain can be impressive, but it is reserved for older patients.
- 2-minimally constrained total replacement
 - 3-constrained joints
- 4-minimally invasive total knee replacement

Minimally constrained total replacement

stability provided by prosthesis and some by

- preservation of knee ligaments.
- ACL alone or both ACL and PCL are removed
 - All articular surfaces are replaced with metal on femoral side, polyethylene on a metal tray on tibial side and polyethylene alone on the patella.

Constrained joints

- Artificial joints with fixed hinges are used when there is marked bone loss and severe instability
- The lack of rotation places severe stress on bone / implants interfaces and they are liable to loosen, to break or to erode tibial or femoral shafts.

Minimally invasive total knee replacement

- Not widely used
- Early result suggest that provide some benefits over conventional total joint replacement: less pain ,faster recovery, better quadriceps strength and a better range of movement.

complications

- 1.DVT
- 2.Infection
- 3.lossening

4.Patellar problems

a.Recurrent patellar subluxation or dislocation

b.Complications associated with patellar resurfacing, such as lossening of the prosthetic component, fracture of the remaining bony patella, and catching of soft tissue between the patella and the femur.



TOTAL KNEE
REPLACEMENT



PARTIAL KNEE
REPLACEMENT

