

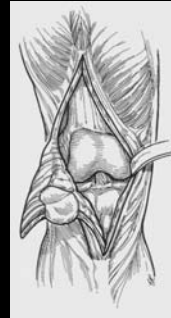
Extended Approaches Objectives

- In some cases an extended approach might be needed
- Achieving wide exposure while protecting the extensor mechanism
- Proximal or distal



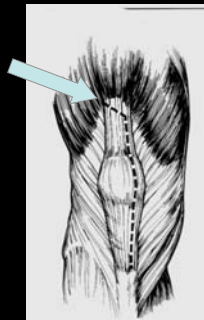
Extended Approaches Proximal exposures

- Coonse-Adams
- Quad Snip
- Quadplasty



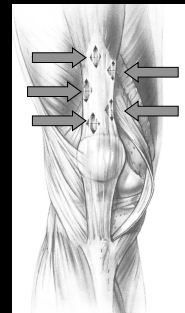
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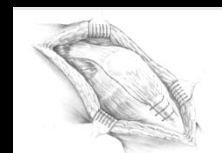
Proximal Exposures Problems

- ↓ range of motion
- delay starting resistance exercises
- provokes an extensor lag



Extended Approaches Distal exposures

- Tubercle Osteotomy



Tibial Tubercle Osteotomy

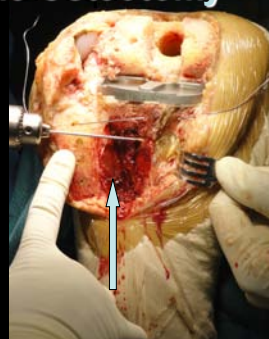
- adequate osteotomy segment including the entire insertion of the patella tendon (6cm)
- the lateral periosteal hinge is maintained and adds to the stability of the construct
- a minimum of 3 wire sutures are passed medially through drill holes to secure the osteotomy segment



Whiteside LA, Ohi MD. Tibial tubercle osteotomy for exposure of the difficult total knee arthroplasty. Clin Orthop 1990;260:6

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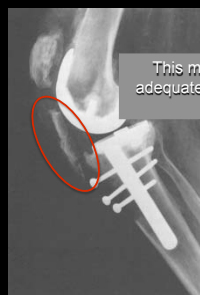
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Tibial Tubercle Osteotomy Advantages

- bone to bone fixation
- permits early rehabilitation
- restores quadriceps excursion and strength



Tibial Tubercle Osteotomy Complications



This method of fixation relies upon an adequate osteotomy segment as well as a solid bone fixation

Be careful!



Tibial Tubercle Osteotomy

- If all the TT has been avulsed, a stronger fixation will be preferred



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To sum up

- Sub and Midvastus approaches provide excellent exposure and allows quicker advancement in rehab after TKR
- Particularly useful when using MIS
- TT osteotomy may be useful in revision cases to avoid extending ext mechanism injuries

Both exposures have a learning curve

Thank You!!!

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