PATELLA TENDON RECONSTRUCTION WITH SEMITENDINOSUS AND GRACILIS TENDONS

PCEA Kikuyu Hospital
EPIDEMIOLOGY

At risk
1. Young males.
2. Elderly individuals

3 -6 % of extensor mechanism injuries and 1.5-2% of all tendon ruptures in lower limb.

Biomechanical Evaluation of Patellar Tendon Repair Techniques: Comparison of Double Krackow Stitch with and without Cerclage Augmentation

Gerhmann et al 2016
SURGICAL PROCEDURE
Semitendinosus has been passed
gracilis to be passed next
Tension grafts target restore a normal insal salvati index
Suture tendons where they overlap to finish
Case 1

Â PCM
Â 42 years
Â Male
Â c/o: pain and swelling of the right knee
Â Hx: fall onto the right knee
Â OE: inability to straight leg raise.
Â P24 positive on HAART.
Pre-op radiograph 2/52 post-op
1 year post semitendinosus gracilllis tendon repair
Post op video
Case 2

Å AN
Å 38 years
Å Prisoner
Å Male
Å c/o: discomfort in the right knee on walking, pain and swelling in the right knee.
Å o/e: inability to straight leg raise.
Å MRI: grade 2 patella tendon tear.
Å Intra-op findings: fatty degeneration of the patella tendon.
Å Reconstruction using semi-t and gracilllis tendons.
Post-op video case 2
Discussion

Å Objectives of patella tendon rupture surgery:
1. Extensor mechanism continuity.
2. Patellofemoral congruency.

Å Variations of the technique. Drill through the patella.

Å A Systematic Review of Complications and Failures Associated with Medial Patellofemoral Ligament Reconstruction for Recurrent Patellar Dislocation

Jay N. Shah, MD
Alternative treatment modalities:

1. Patella tendon autograft
2. Achilles tendon allograft
3. Quadriceps tendon lengthening v-y plasty.
4. Use of cable wire or PDS cable.
Advantages

- Low donor site morbidity
- Preservation of distal attachment
- Rich in tendon fibres yielding a strong graft allowing earlier rehabilitation.
- No need for second operation.
