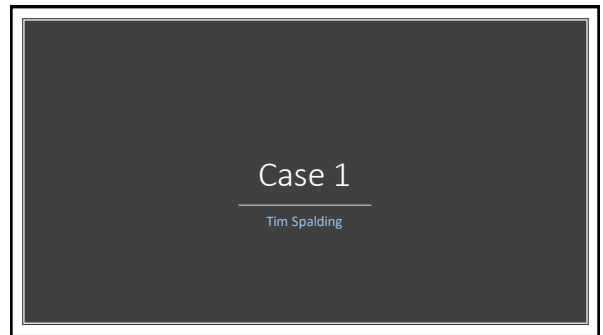




1



2

Female age 28 Rt Knee: Failed Rev ACL reconstruction

Situation 2014

- Paralegal in law firm
- Ex Soccer, played for Major City Ladies team
- Giving way and medial pain. Cant run or play soccer
- Failed 2nd Revision ACL reconstruction (RIGHT)
- Successful LEFT knee ACL reconstruction
- Right: Varus Alignment, ACL deficient, Lateral thrust
- Prone dial test: 10 degrees increased ER
- No PCL sag
- No crepitus

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Female age 28 Rt Knee: Failed Rev ACL reconstruction

Detail of previous surgery

- 2008 Feb: RIGHT knee injury Playing football
- 2008 August: 1st ACL reconstruction: BTB graft
- 2009 July: During training Locked and gave way. Rupture ACL.
- 2009 Nov: 1st Revision using allograft + medial meniscal BH tear resected.
- 2011 July: back to playing football
- 2011 Sept: 1st competitive game: LEFT ACL rupture: Hamstrings graft Feb 2012. Successful
- 2013 June: RIGHT 2nd Revision ACL surgery: 1 stage Hamstring tendons
- Never trusted it. Not back to football

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Imaging R Knee 2014

- Xrays: Varus with WBL 20% Med→Lat
- MRI: 3 Tibial and 3 Femoral tunnels
- CT scan for 3D recon

1.8mm

148 cm

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3D CT reconstructions: R knee

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Treatment options and decisions?

Summary of Issues:

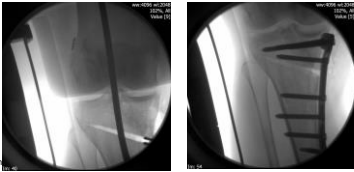
- Varus
- No functional ACL (BTB and both hamstrings used)
- No Medial meniscus
- Multiple tunnels with bone loss. Size >12mm

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Treatment performed: 2 stage reconstruction

1st Stage Dec 2014:
 Bone grafting Tibial and Femoral tunnels (Allograft Femoral Head)
 Tibial osteotomy to neutral. Tomofix plate 8mm opening



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Dec 2014



Arthroscopy and bone grafting tunnels

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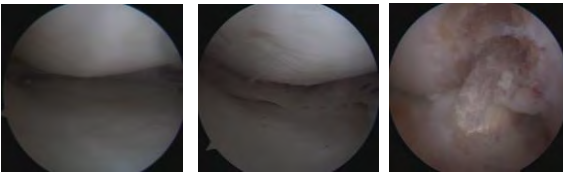
3 months



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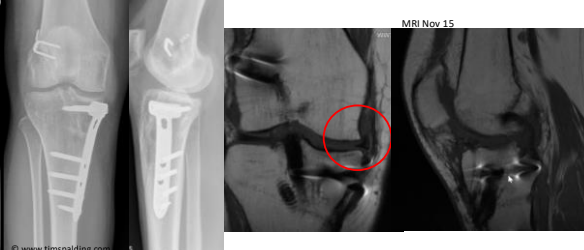
2nd Stage June 2015 (6 months):
 Revision ACL (9mm Tib ant Allograft)
 Medial MAT
 Lateral Tenodesis (IT band)



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Oct 15 (10 months)



MRI Nov 15

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Plate removal and scope 1 year

- Happy walking
- Light gym, no football

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2019: outcome

- Gym work
- Walking and cycling
- Mild kneeling pain
- Stable
- Not football

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Discussion + messages

- Understanding cause of failure ACL
- Priority order of reconstruction
- Realistic expectations
- Compliant patient

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Approach to the complex knee situation:

- 1. Get the information**
 - History – exact problem 'no 1 issue'
 - Laxity pattern – clinical examination
 - Alignment – sagittal, slope, rotation, patella
 - OA / wear – PA 30 xrays, MRI
 - Meniscus – MRI, photos
 - Chondral – Good quality MRI, sequences
 - Character of patient: Previous Rehab
 - Patient expectations, compliance
- 2. Sort the priorities**
 - Dominant Pain or instability
 - Or both 50:50
 - Meniscus or chondral
- 3. Decide timings + Grafts**
 - Allograft or Auto
 - Staged
 - Simultaneous
 - Patient, Geography, Surgeon factors

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Here is what we follow

Joint Restoration Philosophy

Biomechanics

- Realignment Osteotomy
- Ligament Reconstruction
- Meniscus Allograft Transplantation

➔

Biology

- Articular Cartilage Repair
- Adjuvant Therapies

Original Drawn by Alan Getgood

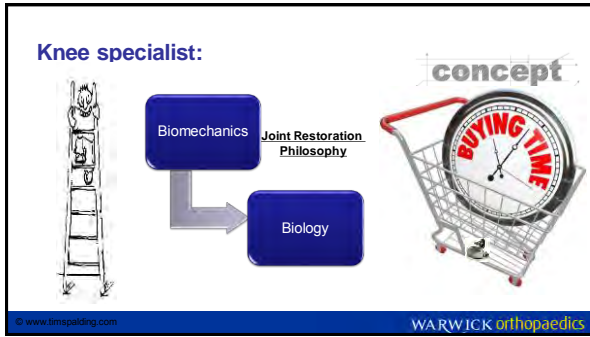
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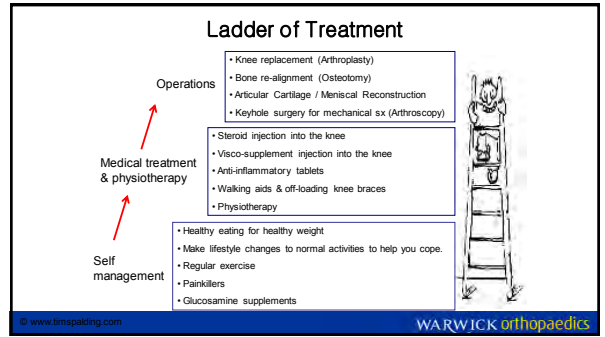
Joint Preservation Principles

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