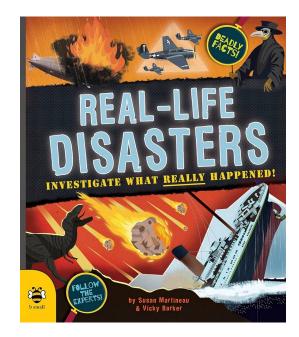
### My worst cases, and how I managed them

Inge Instagrammed by av/kagor

David A Parker FRACS

Advanced Course on Knee Surgery

Val D'Isere 2025



The (Knee) Institute







### Declaration of Interest

The author has the following disclosures:

- editorial board of: AJSM, JISAKOS, AP-SMART Journal, OJSM
- hold shares in: Personalised Surgery, Ganymed Robotics
- received royalties from: Smith & Nephew
- done consulting work for: *Smith & Nephew*
- given paid presentations for: Arthrex, Smith & Nephew
- received institutional support from: *Smith & Nephew, Zimmer, Corin, Arthrex*



### Thank you for a wonderful meeting!



# Case 1

#### **David Parker**



### 46yo Female

- Public Servant
- Otherwise healthy
  - History of neuroendocrine tumours
- Bilateral patellofemoral instability since teenage years
- Right knee arthroscopy 20 years earlier
  - Nil other surgery
- Constant pain
- Stiffness
- Instability

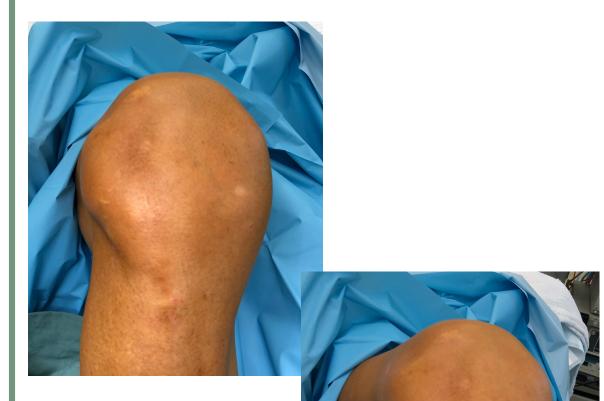


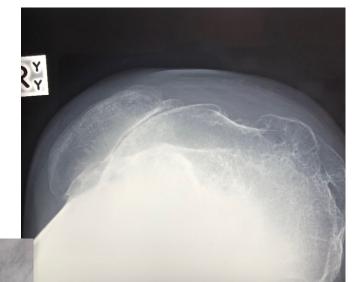
### Physical examination

- Healthy
- Normal alignment
- Stiff getting up  $\rightarrow$  normal gait
- 5 125<sup>0</sup>
- Patella tracking
  - Laterally subluxed in full extension  $\rightarrow$  dislocates in flexion



### Physical examination / Imaging







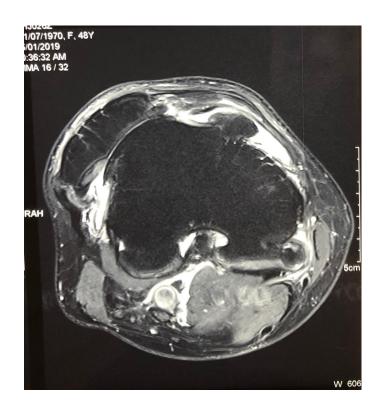
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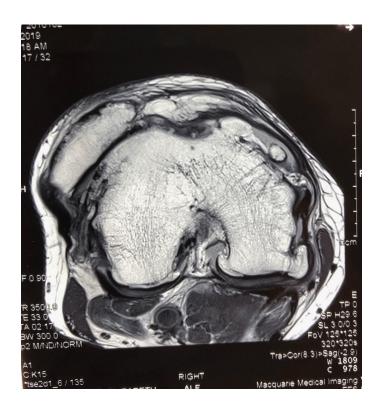






### MRI









### Surgery: Start with the left knee

- Diagnostic Scope  $\rightarrow$  no loose fragments / tibiofemoral ok
- Lateral Arthrotomy
- TTO (Trillat) 1cm medial
- Patellofemoral Arthroplasty (Zimmer GS)
- Quadsplasty
- $\rightarrow$  Patella tracking ok  $\rightarrow$  left the OR happy.....



### Postop progress

- Brace 0 30<sup>0</sup> initially  $\rightarrow$  progress to 90<sup>0</sup> over 6 weeks
- Good initial progress
- 6 week review
  - Walking normally
  - No extensor lag
  - $0 80^{\circ}$
  - Beyond 70<sup>0</sup> ? Patella subluxing laterally
- 10 week review
  - Recurrent patella subluxation in flexion



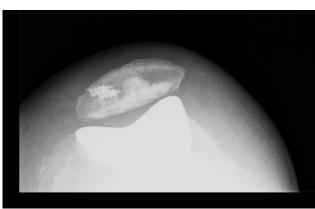
andmark

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### Back to the Operating Room...

- Revision Surgery
  - More extensive quadsplasty
  - V-Y Lengthening
  - MPFL Reconstruction (ST)
  - MPTL Reconstruction (G)
- Slow rehab
- Good outcome





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### The next year we did the right knee

- Quadricepsplasty
  - Extensive but not V-Y
- TTO Trillat
  - Shifted Proximally 10mm and medially 15mm
  - Fluoroscopy to assess patellar height
- MPFL reconstruction with ST
  - After TTO fixation
- VMO Advancement
- $\rightarrow$  Good recovery (only one operation!)



### How is she now? (7 years)

"She is incredible - has had two hips since and even runs occ now which she had not done since a teenager"





### What did I learn?

- I appreciated the quads shortening
  - But not how significant it was
  - Needed more extensive quads release and proximalising of TT
    - Intraoperative assessment once patella reduced
    - Fluoroscopy to assess patellar height  $\rightarrow$  adjust tubercle position
    - Aim for more flexion intraoperatively
- The need for augmentation medially (MPFL)

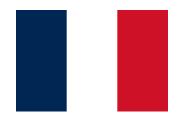


## Case 2



# Disaster .... Triumph (?)

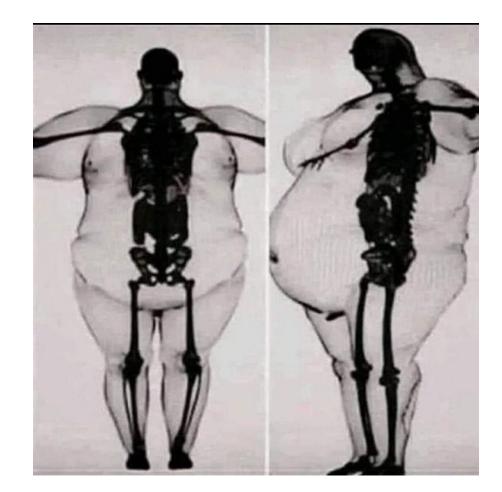
### Sebastien Lustig





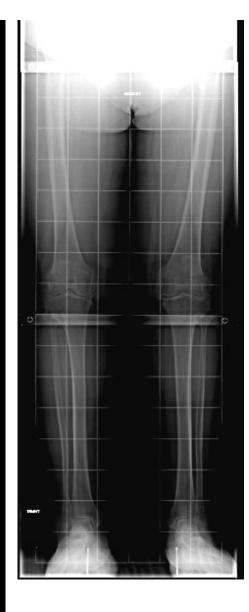
#### • Female

- 68yo
- 155cm / 110kg = BMI 46
- Left Knee
- CW HTO 12 years ago













### **March 2018**

#### Triathlon PS F1 T1





### **April 2018**











### **April 2018**







### 24 April 2018







### Not the end ....













### June 2019

- TTO
- SAE
- VMO







### August 2019

Ex Mech disruption Fem loosening « Spin Out ! »



G

### Sept 2019

- Revision femoral component
- Allograft Ext Mech



### 23/11/2022

- 3 year follow up
- Not that bad....













#### Lessons Learned

- Don't operate on superobese
- Avoid notching with PS TKA
- ORIF should be done properly
- Distal femur has high risk of patella complication and loosening
- Never give up....Keep smiling!



## Case 3

### **David Parker**



### 70yo Female

• TKR for OA 18 months earlier (elsewhere)

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- Medial Pivot (cemented + patella)
- Struggled to regain ROM
- Arthroscopy and MUA 3 months postop
  - Apparently achieved 125<sup>0</sup>
- Repeat MUA 1 month later
  - Apparently achieved 130<sup>o</sup>
- Physio+++
- ROM plateaued at 9 months
- Apparently good preop ROM

### Presentation to me at 18 months postop

- Main complaint stiffness limiting activities
  - Stairs, Chair etc
- Minimal pain
- Otherwise healthy
- Wants to ski, golf, dog agility
- Examination
  - Neutral Alignment
  - Minimal swelling / warmth
  - 5 75<sup>0</sup>
  - Gait OK





### Investigations

- Plain Xrays
- CT rotational profile satisfactory
- Bloods normal









Erect

### **Revision surgery**

- Revision to PS
  - Robotic assisted
  - Arthrolysis
  - Rectus snip
  - Femur downsized
- Intraoperative Fracture MFC
  - Plate fixation
  - Implant
- Postop
  - no restriction ROM
  - Protected weight bearing

- 6 Months Postop
  - Fracture healed
  - $0 115^{\circ}$
  - Golf 3 times / week
  - Still talks about the fracture...

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Landmark



### Imaging (6 months)







Sydney Orthopaed Research Institute

### What did I learn?

- Be patient & gentle
- Use the right instruments!
- Appreciate the risks
  - Bone loss
  - Female
  - Small size
- Every problem has a solution...







# WELCOME See you in Munich!

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