Periprosthetic Proximal Tibia Fx

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Managing periprosthetic tibia fractures: International perspectives

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Lewis et al. OTA International (2022) e241

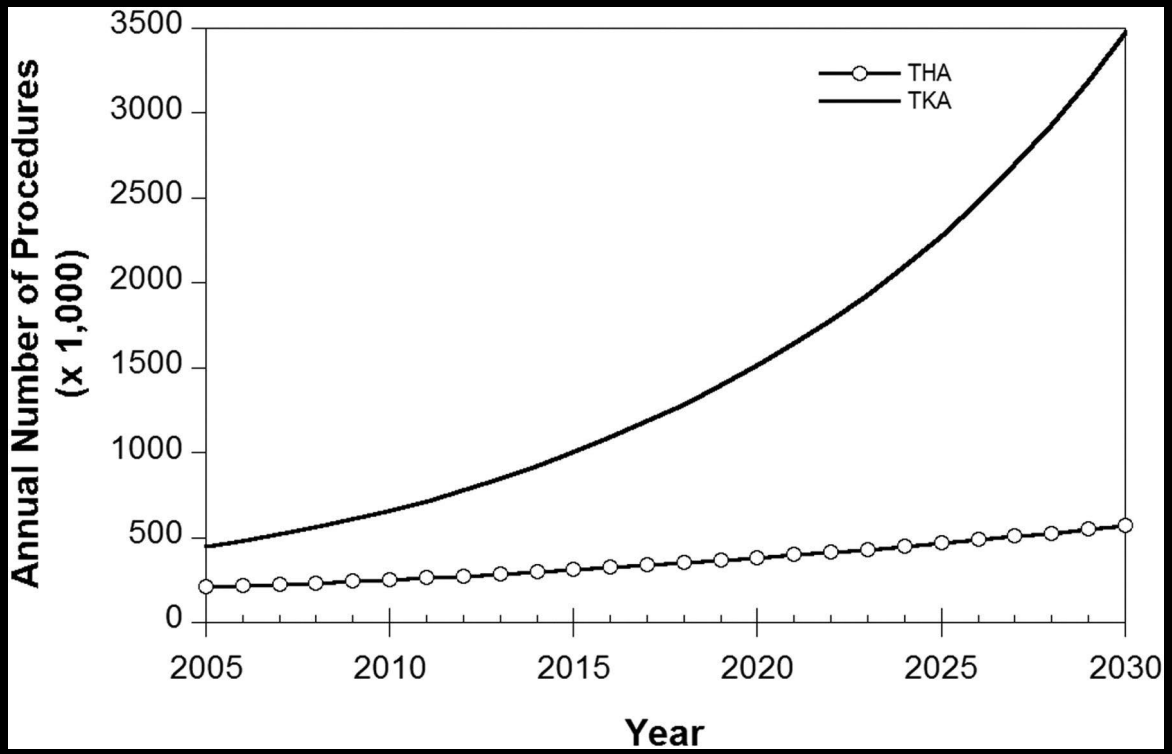
No Data

6 Cases

Summary: Knee arthroplasty, both total knee and unicompartmental, has had a significant impact on millions of patients globally. Although satisfaction is usually high, complications such as periprosthetic fracture are increasingly common. Distal femur periprosthetic fractures are relatively well researched and understood in comparison with periprosthetic proximal tibia fractures (PTFs). The management of PTFs is essentially an evidence-free area. This review explores the literature (or lack thereof) and integrates cases from Australia and Japan. As it stands, there is scant literature relating to all facets of PTFs, including, most concerningly, the management of them. Larger studies are required to help further investigate this important

Background

As rates of primary & revision TJA continue to rise…



Kurtz, 2007

…so too will the number of PPX

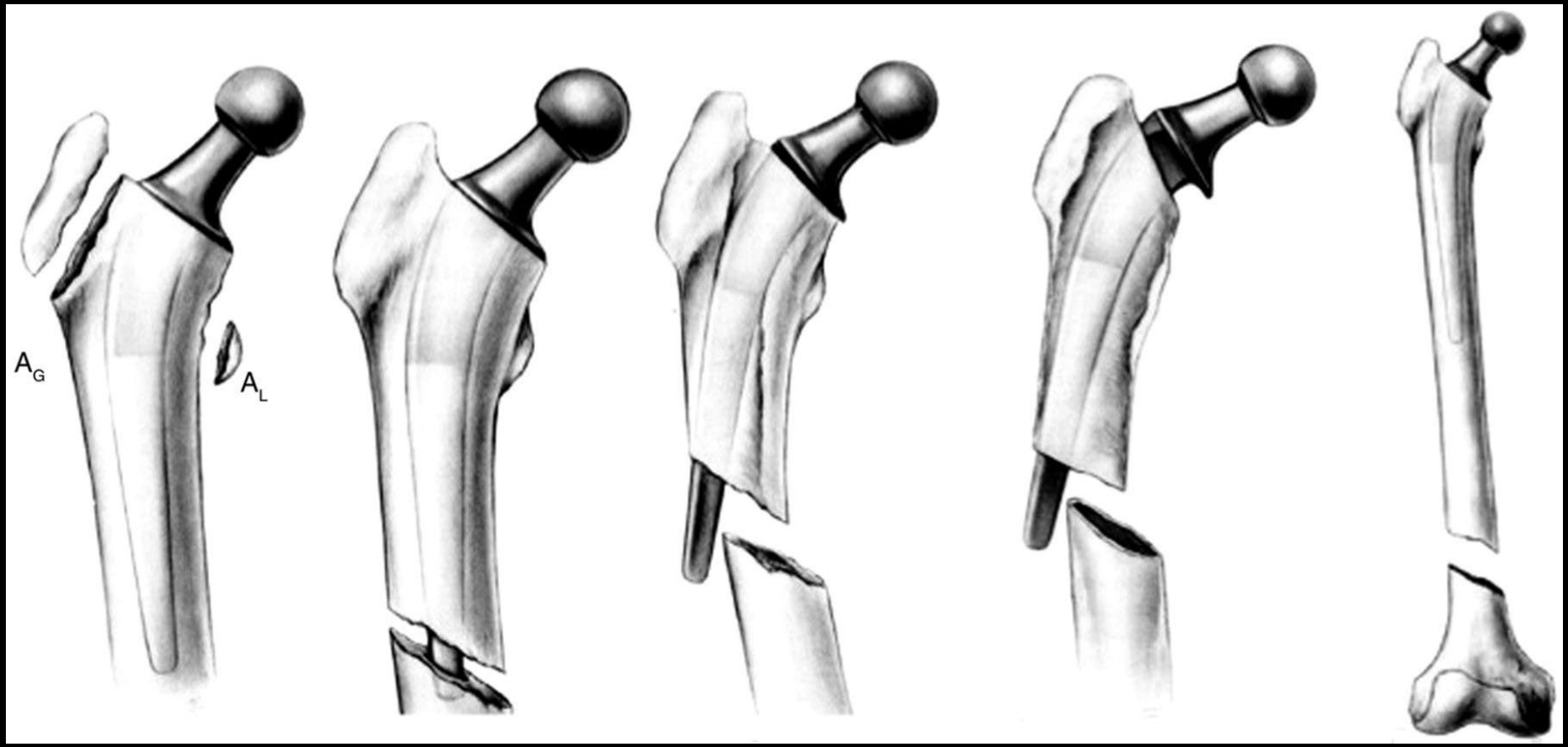
J Arthroplasty. 2015 Oct;30(10):1688-91. doi: 10.1016/j.arth.2015.04.038. Epub 2015 May 5.

Periprosthetic Fractures: A Common Problem with a Disproportionately High Impact on Healthcare Resources.

Toogood PA[1], Vail TP[2].

- National Hospital Discharge Survery 2006-2010
  - 26,000 primary TJA
  - 4,400 revision TJA
    - 259 for PPX
      - ORIF femur: 28-52%
      - Revision THA: 17-23%
      - Revision TKA: 5-13%
      - ORIF tibia, patellar ORIF/revision: rare

Classification?



AO/OTA (Vancouver) Classification

- A: Avulsions
- B: Fracture around component
  - B1: Stable Implant
  - B2: Loose implant, good bone
  - B3: Loose implant, bad bone
- C: Fracture distal to implant

Treatment Basics

- A:
  - Tubercle Avulsions
    - ORIF
  - Collateral ligament avulsions
    - ORIF?
    - Revision to constrained liner

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    - Locking plates for proximal fixation
    - Minimally invasive, respect skin bridges
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Treatment Basics

- B2: Loose Implant
  - Revision TKA
    - Cones
      - Load residual metaphysis
    - Stems
      - Bypass problem and support via intact diaphysis

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Treatment Basics

- B3: Loose Implant, bad bone
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    - Tumor prosthesis
      - Sacrifices bony insertion of extensor mechanism

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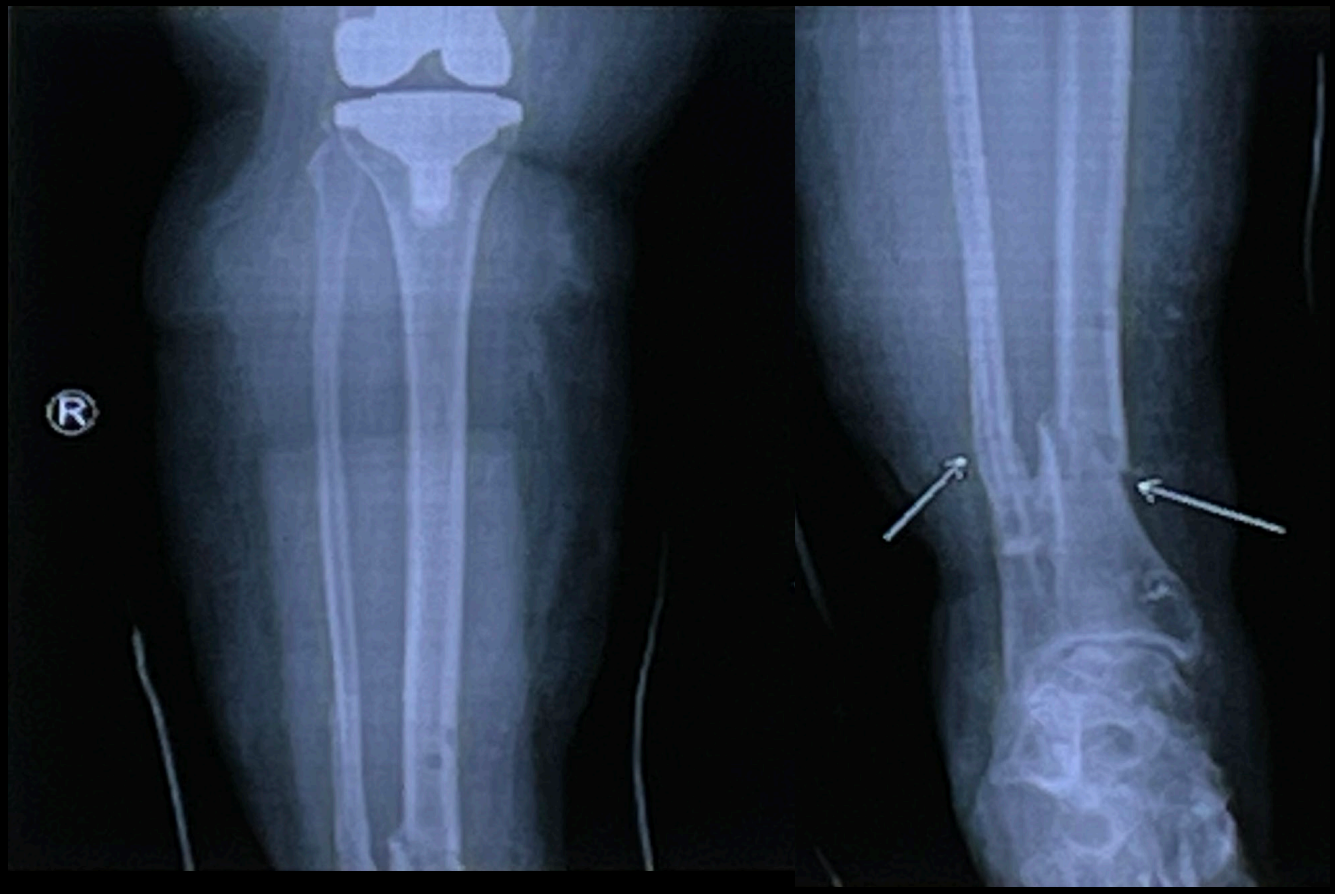
Treatment Basics

- C:
  - Fixation:
    - Plating
    - IMN



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- C:
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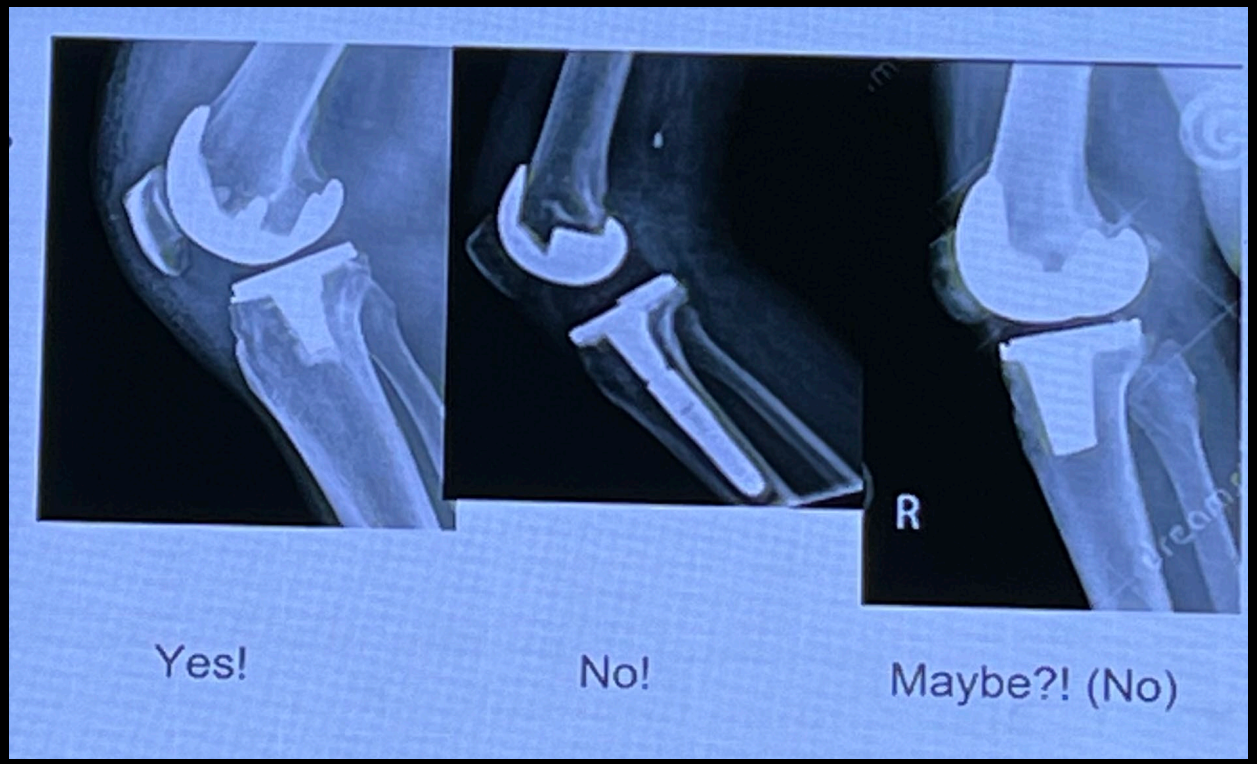

Thank you Jack Wixted from BID for the images

Summary

- Essential no evidence to guide treatment
- Classify and treat like any PPX
  - A
  - B1, B2, B3
  - C


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Thank You