

## INTRODUCTION TO ORTHOPAEDIC SURGERY

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1

## DISCLOSURE

In relation to this presentation, I declare the following, real or perceived conflicts of interest:

## NIL

A conflict of interest is any situation in which a speaker or immediate family members have interests, and those may cause a conflict with the current presentation. Conflicts of interest do not preclude the delivery of the talk, but should be explicitly declared. These may include financial interests (e.g. owning stocks of a related company, having received honoraria, consultancy fees), research interests (research support by grants or otherwise) or organisational interests.

2

## LEARNING OBJECTIVES

- Why patients present to Orthopaedic Surgeons/Common presentations
- Common Orthopaedic Conditions
- Considerations in Peri- op Care
- Orthopaedic Procedures/ Indications/ Contra- indications

3

## COMMON PRESENTATIONS

5

## PAIN



6

## PAIN

- Severe/ Minor
- Modulated with medication
- Activity related
- Mechanical
- Rest pain
- Night pain
- Prior treatment?
- Spontaneous/ Injury
- Does it interfere with work/ sport/ life

7

## LOSS OF FUNCTION

- Work
- Sport and leisure- Holidays, travel
- Walking/ mobility
- Shopping
- Self care and independence
- Walking aids
- Carers
- Social function

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8

## DEFORMITY



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9

## DEFORMITY

Valgus Deformity

Corresponding Films



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10

## DEFORMITY

Varus- Bow Leg

Corresponding Films



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11

## DEFORMITY

- Leads to-
- Poor biomechanics
- Greater energy expenditure
- Pain
- Ligament/ bone failure/ further deformity
- Progressive nature
- Compounds loss of function

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12

## COMMON ORTHOPAEDIC CONDITIONS

- Osteoarthritis knee
- Osteoarthritis hip
- Meniscal tearing
- ACL rupture
- Patello- femoral pain

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13

## KNEE ARTHRITIS

- Pain
- Deformity
- Loss of function
- Mechanical vs rest
- Lateral/ medial/ posterior pain

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14

## KNEE ARTHRITIS

- X- Ray
- Ultrasound
- MRI

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15



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16

## TREATMENT

- Analgesics
- Weight loss
- Exercise
- Gait aids
- Injectables
- PRP/ Stem cells
- GLAD
- Surgery

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17

## HIP ARTHRITIS

- Groin pain
- Deformity
- Stiffness
- Gait aids
- Function

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18

## HIP ARTHRITIS

- X-Rays
- ?MRI

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19



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20

## TREATMENT

- Analgesia
- Gait aids
- GLAD
- ?PRP/ Stem cells
- Injectables
- Surgery

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21

## MENISCAL TEARING

- Trauma in young patients
- No trauma in older
- Pain
- Effusion
- Clicking
- Locking
- Loss of function

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22

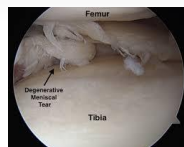
## INVESTIGATION

- XR
- MRI

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23

## MENISCAL TEARS



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24

## TREATMENT

- Conservative/ Analgesics
- Time
- Physiotherapy
- Surgery

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25

## ACL RUPTURE

- Pivoting/ Hyperextension
- Football/ Netball/ Skiing
- Immediate effusion
- Giving way
- Unable to return to high demand sports, job

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26

## INVESTIGATION

- XR
- MRI

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27



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28

## TREATMENT

- Reconstruction
- Conservative

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29

## ANTERIOR KNEE PAIN

- Young adults/ Teenagers
- Spectrum of instability to pain from various sources
- Usually conservative treatment
- Rarely operation

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30

## CONSIDERATIONS IN PERI- OP CARE

- History
- Physical examination
- Scores- Harris Hip, Oxford, Knee society, WOMAC, SF36
- Special investigations
- Medical history
- Physician revue
- ICU/ HDU care
- Consent issues/ transfusions etc...

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31

## INTRA- OP

- Operation
- Prosthesis
- Surgical approach
- Blood loss strategies
- Pain management strategies
- Anaesthesia

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32

## POST- OP

- Pain Management
- Rehab/ mobilisation
- Medical management
- Short stay surgery

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33

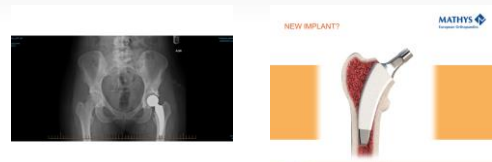
## THR/ TKR

- Indications as discussed
- Contra- indications
- Infection
- Medical
- Charcot joint/ neurological
- Poor rehab prospect/ little prospect of mobility
- Dementia

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34

## THR



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35

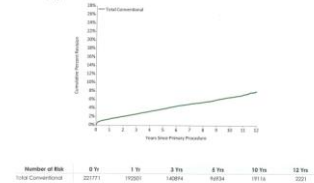
## COMPLICATIONS

- Infection
- Dislocation
- Leg length discrepancy
- Nerve/ blood vessel damage
- Prosthetic wear/ loosening/ mechanical problems
- DVT/ PE
- Death

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36

Figure 104. Cumulative Percent Revision of Primary Total Conventional Hip Replacement (Primary Diagnosis OA)



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37

## TKR



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38

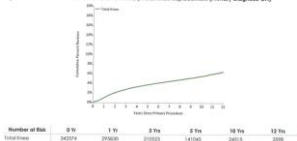
## COMPLICATIONS

- Mostly as per THR

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39

Figure 877. Cumulative Percent Revision of Primary Total Knee Replacement (Primary Diagnosis OA)



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40

## FUTURE TRENDS

- Robotics/ AI
- Better pain management
- Day Surgery TJR
- Prosthetic monitoring
- Better predictors of outcome/ PROMs
- More data collection NJRR to help guide treatment
- ?AI prosthetic redesign
- ??Molecular medicine

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41

THANKYOU

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42