

# Examination of the Knee

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Ask permission and explain  
what you are going to do.

# Steps involved

- History
- Physical examination
  - Inspection
  - Gait
  - Palpation
  - Movement
  - Specific tests
- Imaging



# History

- Main symptom
  - Pain
  - Swelling
  - Locking
  - Giving way
- Age of patient
- Mechanism of onset of symptoms

# Four main diagnostic groups

- Anterior knee pain
- Traumatic –bone, ligament , meniscus
- Degenerative osteoarthritis
- Inflammatory joint disease

# Age

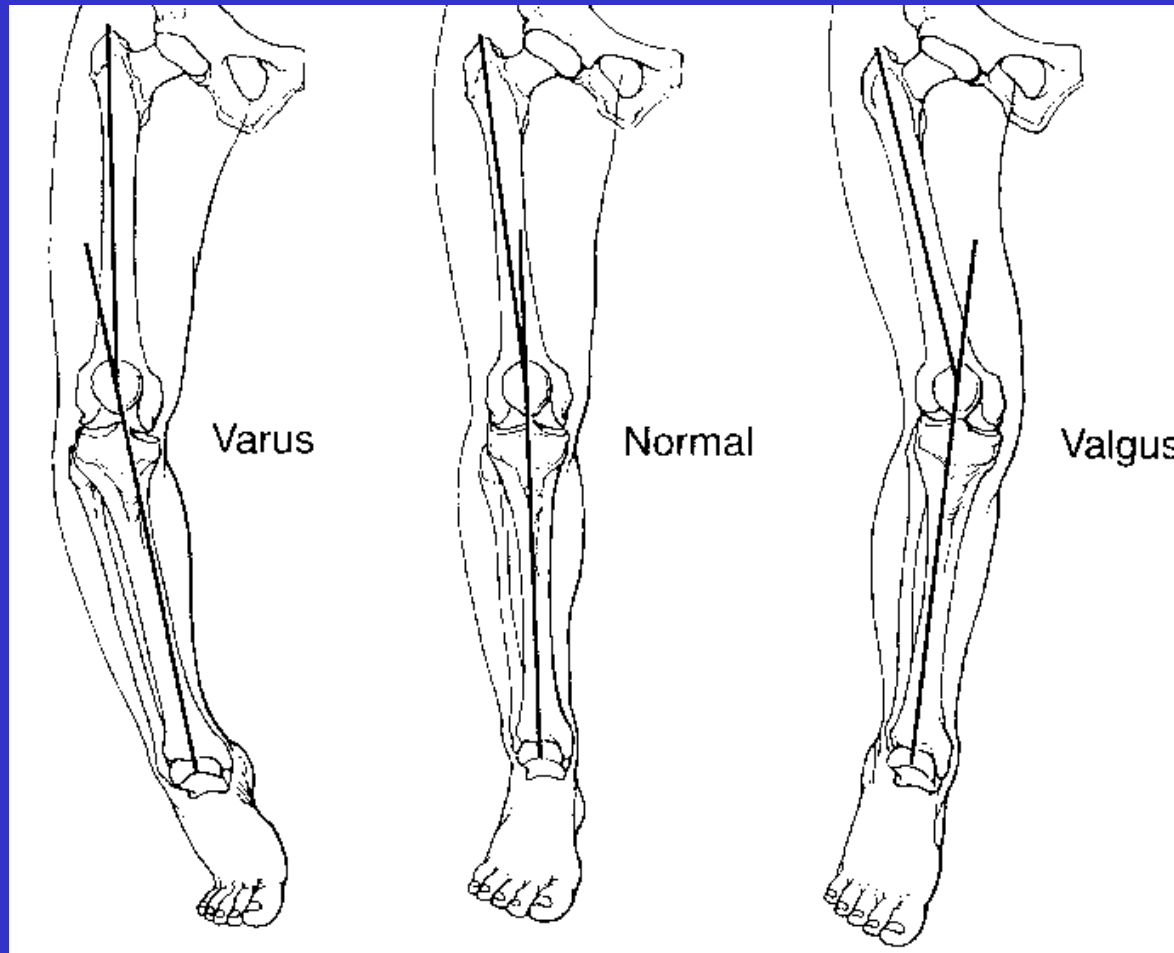


# Inspection

- Swelling
- Muscle bulk
- Alignment
- Scars
- Sinuses
- Ability to
  - Walk
  - Squat
  - Hop



# Alignment





# Gait



# Specific tests



# Swelling

- Early and tense
  - Haemarthrosis
- Late and fluctuant
  - Reactionary effusion
- Hot and painful
  - Infection



# Swelling

- Patella Tap
  - Grade 1 minimal fluid
  - Grade 2 slight lift off
  - Grade 3 ballottable patella
  - Grade 4 tense effusion, not ballottable

# Cross fluctuation



# Movements

- Straight leg raise
- Active flexion
- Fixed flexion
- Measure range
  - Use goniometer



# Palpation

- Patella
- Joint line
- Condyles
- Popliteal fossa



# Stability

- Collateral ligaments



# Stability

- Anterior Cruciate  
– Lachmann's test



# Stability

- Cruciate ligaments
  - Ant draw
  - Post sag



# Meniscal tests

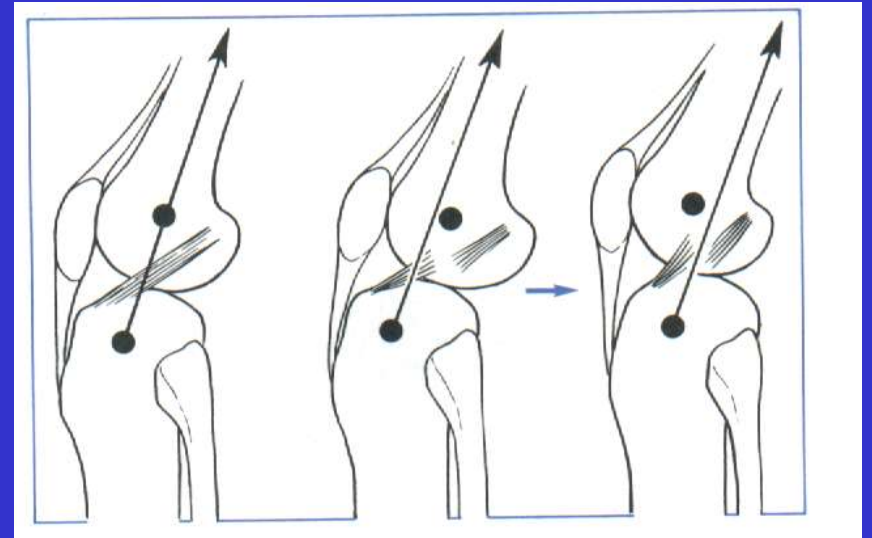
- McMurrays



# Specialist tests

- Anterior pivot shift
- Rotatory instability

# Anterior Pivot Shift



# Reverse Pivot Shift

# Dial test

# External rotation recurvatum



# Don't forget to

- Examine the hip and ankle
- Feel for peripheral pulses
- Sensory testing
- Look at the back of the knee

# X-rays



# MRI



Thank the patient