Knee injuries

Queensland Ambulance Service

Exclusion from transport to General Practice

- Obvious deformity of knee/lower limb
- Compound fracture (skin broken over deformity)
- Neurovascular compromise (no sensation or warmth in lower limb segment)
- Complete inability to weight bear on knee

Management

- Analgesia as required
- Ice
- Vacuum splint or bandage support.

General Practice

Assessment

Ottawa knee rule for knee injury radiography

A knee X-ray series is only required for knee injury patients with any of these findings:

1. Age 55 or older OR
2. Isolated tenderness of patella (no bone tenderness of knee other than patella) OR
3. Tenderness of head of fibula OR
4. Inability to flex to 90° OR
5. Inability to bear weight both immediately and in the Emergency Department for 4 steps (unable to transfer weight twice onto each lower limb regardless of limping).

Management

Extensor mechanism injury (quadriceps tear, patella fracture, patella tendon tear):
- Consider appropriate analgesia +/- NSAID
- Rigid splint
- Crutches, if required
- Refer to SCHHS Fracture Clinic.

Tibial plateau fracture:
- Minimal displacement:
  - Consider appropriate analgesia +/- NSAID
  - ROM brace – if not available refer to Emergency Department
  - Crutches
  - Refer to SCHHS Fracture Clinic
- Significant displacement:
  - Call Orthopaedic Registrar (5470 6600).

Suspected meniscal tear:
- Consider appropriate analgesia +/- NSAID
- Soft immobilisation
- Crutches, if required
- Review with usual G.P. in 1 week (if not improving, consider MRI).

Suspected cruciate ligament injury:
- Consider appropriate analgesia +/- NSAID
- Soft immobilisation or ROM/Richards splint
- Crutches
- Review with usual G.P. in 1 week (if not improving, consider MRI).

Suspected collateral ligament injuries:
- Consider appropriate analgesia +/- NSAID
- Soft immobilisation or Richards splint
- Crutches, if required
- Consider referral to Physiotherapist
- Provide supplied information handout to patient
- Review with usual G.P. in 1 week (if not improving, consider MRI).
# Escalation triggers

Refer to the Emergency Department

If the patient has any of the following, please call the Orthopaedic Registrar (5470 6600) prior to referral to the Emergency Department:

- Significantly displaced fractures
- Fracture-dislocation
- Compartment syndrome
- Neurovascular deterioration
- Worsening pain requiring intramuscular analgesics
- Any other serious clinical concerns not already listed.

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**Disclaimer:**
This clinical pathway is a suggested guideline only, based on current evidence, and does not replace use of clinical judgement.

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**Governance for Safety and Quality in Health Service Organisations - Standard 1**
Involves setting direction, making policy and strategy decisions, overseeing and monitoring organisational performance and ensuring overall accountability for a service.

**Service Delivery - Standard 11**
Patients and the community have access to safe, high quality healthcare services that are appropriate, effective and meet their needs.

**Provision of Care - Standard 12**
The intention of this standard is to ensure high quality care is delivered to consumers/patients throughout the care continuum.