Symptoms > 3 months
Consider Non-Urgent Arthroscopic Partial Meniscectomy

Symptoms < 3 months
Optimal Non-Operative Treatment & Re-Assess
(e.g. provide information, physiotherapy, exercise, analgesia, steroid injection)

Common Clinical Presentations

1. Locked Knee
   Assessment: Arthroscopic meniscal surgery indicated

2. Acute Injury with Meniscal Target (MRI)
   Assessment: Meniscal preservation may be appropriate

3. Meniscal Target (MRI) & Corresponding Symptoms / Signs
   Assessment: Arthroscopic meniscal surgery may be beneficial after a trial of non-surgical treatment

4. Possible Meniscal Target (MRI) & Corresponding Symptoms / Signs
   Assessment: Further non-surgical treatment is first line
   
   (Arthroscopic meniscal surgery may be indicated in selected cases if symptoms do not improve – to be decided on reassessment)

5. Advanced Structural OA & Meniscal Tear (or Arthritic Symptoms / Signs only)
   Arthroscopic meniscal surgery usually* not appropriate
   (*except in uncommon special cases: a second opinion is advised)

Recommendation

Urgent Arthroscopic Meniscal Surgery

Consider Arthroscopic Meniscal Repair (if suitable candidate)

No Arthroscopic Meniscal Surgery
(Provide information and consider physiotherapy, exercise, analgesia, weight loss, steroid injection, arthroplasty, osteotomy)

NB. Patient treatment preferences must always be considered.
This guideline document should support, not substitute for, shared decision-making.
**Definitions and terminology:**

### Degenerative meniscus and meniscal tears
- A degenerative meniscus develops progressively with degradation of meniscal tissue and this may be revealed by intra-meniscal high signal on MRI imaging.
- A meniscal 'tear' is a defect or split in the meniscocapsular complex, which can occur in a degenerative or non-degenerative meniscus.
- Degenerative meniscal lesions (high signal or tear) are frequent in the general population and are often incidental findings on knee MRI. There may or may not be a memorable history of knee injury.

### Approach to imaging (secondary care imaging protocol)
1. Plain radiographs (weight-bearing AP and lateral +/- Rosenberg +/- skyline view) are the first line investigation when OA is suspected.
2. In patients where OA is not suspected, MRI is the first line investigation*.
3. If plain radiographs do not demonstrate advanced osteoarthritis (Kellgren-Lawrence-L 4) and meniscal symptoms predominate, then MRI imaging is indicated.

*In certain cases, when clinical findings are conclusive (e.g. locked knee), clinicians may apply their own judgement on the need for MRI imaging.

### Classification of structural osteoarthritis (OA)
- **Early or No Structural OA:** Kellgren-Lawrence Grade 0 or 1 on plain radiographs and/or normal MRI, or MRI with possible chondral signal change and no chondral loss.
- **Mild to Moderate Structural OA:** Kellgren-Lawrence Grade 2 or 3 on plain radiographs and/or partial thickness chondral loss on MRI.
- **Advanced to End-stage Structural OA:** Kellgren-Lawrence Grade 4 on plain radiographs and/or significant areas of full thickness chondral loss on MRI*.

*Excluding cases of contained full thickness cartilage / osteochondral defects.

### Classification of symptoms and signs

#### MENISCAL: Strongly Suggestive of a Treatable Meniscal Lesion
- **Locked knee:** sudden onset, complete mechanical block to flexion or extension of the knee, detected on clinical examination and which does not resolve despite adequate analgesia.
- **Locking:** An intermittent block to normal range of movement of the knee (commonly a block to extension) with an associated unlocking movement. Knee returns to near normal after unlocking.
- **Catching:** the sensation of something intermittently out of place in the knee and interfering with joint movement.
- **Tender, palpable meniscal tissue:** the finding on clinical examination of a discrete, tender lump, close to the joint line.

#### POSSIBLY MENISCAL: Potentially Suggestive of a Treatable Meniscal Lesion
- **Episodic sharp knee pain:** sharp, intermittent knee pain, occurring with sudden onset.
- **Intermittent knee swelling:** symptom of periodic swelling of the knee, lasting for hours to days, that has occurred over a period of weeks or months.
- **Knee effusion:** a clinically detectable intra-articular fluid collection of the knee joint.
- **Activity avoidance:** the active avoidance of specific, potentially provoking, movements or activity e.g. twisting.
- **Squatting pain:** knee pain that is exacerbated by deep flexion when weight bearing (may be reported by the patient or elicited during clinical examination).
- **Clicking +/- pain:** Clicking: a clicking noise or sensation when moving the knee. Painful clicking: a clicking noise or sensation when moving the knee that is associated with pain.
- **Meniscal provocation tests:** e.g. McMurray's, Apley's, Thessaly.
- **Joint line point tenderness:** point tenderness on the joint line, detected on clinical examination.
- **Posteroomedial joint line tenderness:** tenderness on deep palpation of the joint line, from mid medial collateral ligament posteriorly, corresponding to the location of the commonest posteromedial degenerative meniscal lesion.

#### ARTHRITIC: Osteoarthritic Symptoms and Signs
- **Inactivity pain and stiffness:** the temporary, subjective sensation of stiffness on initiation of movement, often with pain, after periods of immobility (e.g. sleeping, prolonged sitting).
- **Crepitus:** crunching, grating or creaking detected clinically on active movement of the knee.
- **Bony enlargement:** abnormal shape of the normal knee bony contour visible on inspection or detected on clinical examination.
- **Bony tenderness:** tenderness on clinical palpation of the bone adjacent to the joint.
- **Aching pain:** constant knee pain during and after activity.
### Clinical Case Examples:

| Case 1   | Onset: 1 week ago, twisting injury  
|          | Symptoms/Signs: Locked Knee  
<table>
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<th>Imaging: Bucket handle meniscal tear</th>
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| Case 2   | Onset: 6 months ago, no injury  
|          | Symptoms/Signs: Arthritic only  
|          | Imaging: Advanced structure OA +/- Meniscal tear |
| Case 3   | Onset: 1 week ago, twisting injury  
|          | Symptoms/Signs: Meniscal  
|          | Imaging: Longitudinal tear in repairable zone of meniscus. |
| Case 4   | Onset: 1 month ago  
|          | Symptoms/Signs: Meniscal  
|          | Imaging: Displaced parrot beak tear. Moderate OA. |
| Case 5   | Onset: 4 months ago  
|          | Symptoms/Signs: Meniscal  
|          | Imaging: Displaced parrot beak tear. Moderate OA. |
| Case 6   | Onset: 6 months ago  
|          | Symptoms/Signs: Possibly meniscal  
|          | Imaging: Complex posterior horn tear. |

### Recommendation

- **Urgent Arthroscopic Meniscal Surgery**
- **No Arthroscopic Meniscal Surgery**
- **Consider Arthroscopic Meniscal Repair** (if suitable candidate)
- **Optimal Non-Operative Treatment & Re-Assess**
- **Consider Non-Urgent Arthroscopic Partial Meniscectomy**
- **Optimal Non-Operative Treatment & Re-Assess**