Mr Keith Winters MBChB, FRACS (Orth) Specialist Orthopaedic Surgeon

Ph: (03) 9598 0691

Meniscal tear

The meniscus are C-shaped fibrocartilagenous structures in the medial and lateral compartments of the knee that distribute load and improve the congruity of the joint. Tears of the meniscus usually occur during a low energy twisting injury. Commonly involves the medial side, and may be associated with concurrent ACL tear. May be longitudinal, oblique, radial or horizontal cleavage (degenerative)

What to ask in the history
- Injury- mechanism (low energy, twisting), chronology
- Pain – location (may be vague or localised to involved side), usually brought on with activity
- Swelling – starts a few hours after injury, persists but worse with activity
- Stiffness/locking – inability to fully extend the knee, occurs when a bucket handle (longitudinal tear) incarcerates in the joint.
- Previous injury
- Treatment – NSAIDs, Physiotherapy, other modalities

What to look for on Examination
- Lower-limb alignment – malalignment may suggest arthritic /degenerative cause for tear
- Gait – antalgic (reduced stance-time on involved leg)
- Squat – pain or inability to squat is a sensitive test for detecting meniscal tears
- Effusion – patella ballotment if moderate or suprapatella sweep test if mild
- ROM – fixed flexion deformity if locked (incarcerated meniscus)
- Pain – localised to joint-line on affected side
- McMurrays/Apleys grind test – pain or click localised to affected side when knee is circumducted with varus or valgus strain.
- Stability – rule out associated ACL (anterior drawer/Lachmans) and Collateral ligament (varus/valgus stress) injury

What investigations to order
- Standing AP/lateral knee

How to treat
- NSAIDs
- Physiotherapy – usually will not settle down
- Refer

When to refer
- suspected meniscal tear – meniscal tears usually don't heal

What the surgeon may do
- MRI scan
- Arthroscopy – Usually requires partial meniscectomy. If the injury is recent (<8 weeks) and patient is young (<30yrs), may be a candidate for meniscal repair