

**Procedure that requires Prior Approval
from the Bedfordshire MSK service (Circle Bedfordshire)
Bedfordshire, Hertfordshire, West Essex and Milton Keynes
Priorities Forum Statement**

Number	21
Subject	Knee arthroscopy including arthroscopic surgery and arthroscopic washouts
Date of decision	Feb 2017
Date of refresh	Dec 2019 – EBI statement for arthroscopy for osteoarthritis (OA)
Date of review	Feb 2020

GUIDANCE

Osteoarthritis (OA) of the knee

Referral for arthroscopic lavage and debridement should not be offered as part of treatment for osteoarthritis.

NHS England Evidence based Interventions (EBI) statement (Jan 2019)¹

Arthroscopic knee washout (lavage and debridement) should not be used as a treatment for osteoarthritis because it is clinically ineffective. Referral for arthroscopic lavage and debridement should not be offered as part of treatment for osteoarthritis, unless the person has knee osteoarthritis with a clear history of mechanical locking². More effective treatment includes exercise programmes (e.g. ESCAPE pain), losing weight (if necessary) and managing pain. Osteoarthritis is relatively common in older age groups. Where symptoms do not resolve after nonoperative treatment, referral for consideration of knee replacement, or joint preserving surgery such as osteotomy is appropriate. For further information, please see:

- <https://www.nice.org.uk/guidance/ipg230/evidence/overview-pdf492463117>
- <https://www.nice.org.uk/guidance/ipg230/chapter/1-Guidance>

¹ <https://www.england.nhs.uk/evidence-based-interventions/ebi-programme-guidance/>

² as opposed to morning joint stiffness, 'giving way' or X-ray evidence of loose bodies. Arthroscopy may be indicated for true locking, caused by meniscal lesions or loose bodies in the knee joint. These situations are uncommon in patients with osteoarthritis of the knee (1). Evidence shows that joint lavage, used alone without debridement, for patients with knee osteoarthritis is not effective and should not be used (2, 3).

- <https://www.nice.org.uk/donotdo/referral-for-arthroscopic-lavage-anddebridement-should-not-be-offered-as-part-of-treatment-forosteoarthritis-unless-the-person-has-knee-osteoarthritis-with-a-clearhistory-of-mechanical-locking-not>
- <http://www.escape-pain.org/>

Non-osteoarthritic conditions of the knee

Knee arthroscopy can be undertaken where an MRI scan³ has demonstrated clear evidence of an internal joint derangement (i.e. ligament rupture or loose body) and where conservative treatment has failed or where it is clear that conservative treatment will not be effective.

Knee arthroscopy is thereby carried out for at least one of the following clinical indications:

- Removal of loose body that is causing significant symptoms
- Meniscal repair or partial meniscectomy for traumatic meniscal tears only *see definition below (4, 5)
- Ligament reconstruction/ repair (including lateral release)
- Synovectomy
- In rare circumstances, intractable knee pain which may benefit from arthroscopic treatment (subject to agreement by local exceptional treatment panel)

Knee arthroscopy should **not** be considered for the following:

- As a primary diagnostic tool, and MRI* should usually be conducted before arthroscopy in nonosteoarthritic conditions.
- Debridement of meniscal tears either with or without osteoarthritis or other degenerative⁴ meniscal injury (6,7)

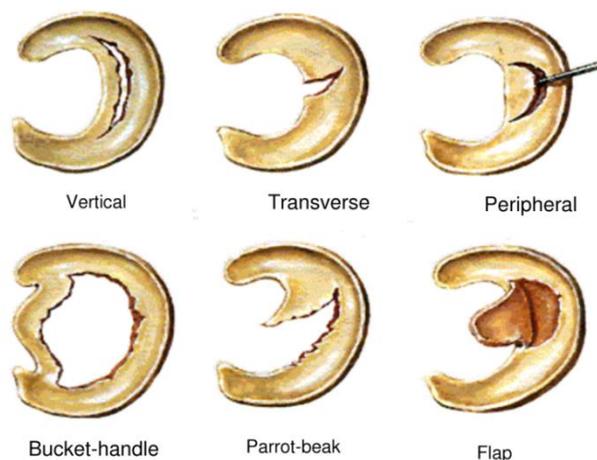
Meniscal tears – further information

Meniscal tears are the most common injury of the knee. They can be classified by their location and type (see figure 1). They may occur in acute knee injuries in younger patients, or as part of a degenerative process in older individuals. Acute meniscal tears typically occur when a person changes direction in a manner that involves rotating or twisting of the knee while the knee is flexed and the corresponding foot is planted. This commonly occurs in sports such as Football, basketball and American football. Older individuals can develop a degenerative tear with minimal or no trauma. In degenerative meniscal lesions, the menisci become stiffer and less compliant with age. It has also been observed that meniscal tissue from patients over 40 years of age has reduced cellularity and healing response than tissue from younger patients.

³ The following symptoms are suggestive of a traumatic meniscal tear: 1. Sudden onset of knee pain resulting from a single physical impact event 2. Decreased range of motion of the knee 3. Locking of the knee

⁴ The following symptoms and MRI finding are suggestive of degenerative meniscal tears: 1. No history of trauma. 2. Knee pain for 3 months or longer. 3. Intra-meniscal linear magnetic resonance imaging signal penetrating one or both surfaces of the meniscus on MRI scan

Figure 1 – Location and type of meniscal tear⁵



Meniscal lesions present with a variety of clinical symptoms including pain, effusion, locking, and persistent focal joint-line tenderness. Displaced tears (such as bucket handle tears) can result in locking and “giving way” episodes. Non-displaced tears on the other hand can adjust meniscus mobility and produce abnormal traction stresses on the capsule and synovium, which result in pain and swelling. *Table 1* is a guide to the ways in which the acute and degenerative tears can be clinically differentiated.

Table 1: Traumatic vs Degenerative meniscal tears

	Traumatic	Degenerative
Age	<30	35-65
Onset	Sudden	Gradual
Hx of trauma	Yes	No
Mechanism	Rotation	Descent and flexion
Swelling	Early	Delayed
Locking	Common	Uncommon
OA	Uncommon	Common
Pain	Yes	Less pain
ROM	Reduced	Full if no loose body
Functional tests	No	Yes

*⁶NB re: X-rays and MRI scanning in primary care

⁵ <https://kneeandshoulderclinic.com.au/knees/surgical-conditions/meniscal-tears/>

⁶ (NB Red flag symptoms or signs include recent trauma, constant progressive non-mechanical pain (particularly at night), long term oral steroid use, history of drug abuse or HIV, septic arthritis, infection, fever, less than 16, haemarthrosis, suspected or confirmed tumour, being systemically unwell, recent unexplained weight loss, unremitting pain, persisting severe restriction of joint movement, unable to weight bear, widespread neurological changes, hip pathology, knee dislocation, quadriceps/ patella tendon rupture, locked knee (will not

For knee pain with suspected osteoarthritis (8):

History and examination alone are usually sufficient to give a working diagnosis of osteoarthritis (OA) in adults age 45 years and older. Consider the following investigations to confirm diagnosis of OA and to rule out other diagnoses:

- X-rays, particularly of weight-bearing joints (MRI not usually indicated in the over 45s where the diagnose is more likely to be OA (meniscal changes can be part of the disease process and can therefore be misleading on an MRI scan conducted before a plain X-ray)
 - used to exclude trauma
 - findings in OA are often non-specific, may be absent in the early stages, and often correlate poorly with symptoms and disability
 - typical radiographic changes of OA include:
 - narrowing of cartilage space
 - marginal osteophyte formation
 - subchondral sclerosis
 - subchondral bone cysts
- laboratory tests:
 - are indicated when a patient:
 - has marked inflammatory symptoms and/or signs, especially involving atypical sites
 - has a recent history of infection or fever
 - is younger than age 40 years
 - presents with abnormal routine blood tests
 - tests can include: erythrocyte sedimentation rate (ESR), full blood count (FBC), rheumatoid factor, synovial fluid analysis, C-reactive protein (CRP), anti-citrullinated peptide antibodies (ACPA)

MRI for knee pain without suspected osteoarthritis (9):

MRI is the examination of choice for the investigation of suspected ligament or meniscal injury. It is likely that these patients would be referred to an Extended Scope Physiotherapist (ESP) prior to a MRI scan being requested and that it would typically be the ESP who would make the request, rather than the GP.

MRI is the examination of choice for the investigation of suspected ligament or meniscal injury. Advantages of MRI are that it is non-invasive, it does not use ionizing radiation and it provides images of soft-tissue structures. It is a well-proven and widely accepted test, with a high sensitivity for detecting meniscal and cruciate ligament injuries.

MRI should be used in patients in whom arthroscopy, is being considered as a significant number of unnecessary arthroscopies may be prevented when preceded by an MRI examination.

extend) and structural deformity. Red flag conditions would include infection, carcinoma, nerve root impingement, bony fracture, avascular necrosis.)

MRI is also indicated for suspected internal derangement to confirm/refute (without evidence of OA on plain film if age >40). NB X-ray first if patient over 40 and suspected soft tissue injury. X-ray first if there is suspected bone trauma.

References

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2. Reichenbach S, Rutjes AWS, Nüesch E, Trelle S, Jüni P. Joint lavage for osteoarthritis of the knee. Cochrane Database of Systematic Reviews 2010, Issue 5. Art. No.: CD007320. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD007320.pub2/pdf/full>
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4. Chatain F, Adeleine P, Chambat P, Neyret P; Société Française d'Arthroscopie. A comparative study of medial versus lateral arthroscopic partial meniscectomy on stable knees: 10-year minimum follow-up. Arthroscopy. 2003 Oct; 19(8):842-9.
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8. Map of Medicine. Suspected Osteoarthritis Pathway – viewed 2014.
9. South Devon and Torbay Map of Medicine Pathway – Direct Access MRI – Knee. Viewed 2014.

Additional NHSE EBI references:

1. NICE guidance: <https://www.nice.org.uk/guidance/ipg230/evidence/overview-pdf492463117>
2. NICE guidance: <https://www.nice.org.uk/guidance/ipg230/chapter/1-Guidance>
3. NICE guidance: <https://www.nice.org.uk/donotdo/referral-forarthroscopic-lavage-and-debridement-should-not-be-offered-as-partof-treatment-for-osteoarthritis-unless-the-person-has-kneeosteoarthritis-with-a-clear-history-of-mechanical-locking-not>
4. British Orthopaedic Association and the Royal College of Surgeons: <https://www.rcseng.ac.uk/-/media/files/rcs/standards-andresearch/commissioning/boa--painful-oa-knee-guide-final-2017.pdf>
5. Siemieniuk Reed A C, Harris Ian A, Agoritsas Thomas, Poolman Rudolf W, Brignardello-Petersen Romina, Van de Velde Stijn et al. Arthroscopic surgery for degenerative knee arthritis and meniscal tears: a clinical practice guideline BMJ 2017; 357 :j1982
6. Brignardello-Petersen R, Guyatt GH, Buchbinder R, et al Knee arthroscopy versus conservative management in patients with degenerative knee disease: a systematic review BMJ Open 2017;7:e016114. doi: 10.1136/bmjopen-2017-016114`
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Codes:

HRG: HB22B/HB22C, HB23B, HB23C

Relevant OPCS(s):

- W82 - Therapeutic endoscopic operations on semilunar cartilage -
- W83 - Therapeutic endoscopic operations on other articular cartilage -
- W84 - Therapeutic endoscopic operations on other joint structure -
- W85 - Therapeutic endoscopic operations on cavity of knee joint

Human Rights and Equalities Legislation has been considered in the development of this guidance