Policy for Knee Arthroscopy for Degenerative Knee Disease

NHS Birmingham and Solihull Clinical Commissioning Group
NHS Sandwell and West Birmingham Clinical Commissioning Group

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The CCG policy has been reviewed and developed by the Treatment Policies Clinical Development Group in line with the groups guiding principles which are:

1. CCG Commissioners require clear evidence of clinical effectiveness before NHS resources are invested in the treatment;
2. CCG Commissioner require clear evidence of cost effectiveness before NHS resources are invested in the treatment;
3. The cost of the treatment for this patient and others within any anticipated cohort is a relevant factor;
4. CCG Commissioners will consider the extent to which the individual or patient group will gain a benefit from the treatment;
5. CCG Commissioners will balance the needs of each individual against the benefit which could be gained by alternative investment possibilities to meet the needs of the community
6. CCG Commissioners will consider all relevant national standards and take into account all proper and authoritative guidance;
7. Where a treatment is approved CCG Commissioners will respect patient choice as to where a treatment is delivered; AND
8. All policy decisions are considered within the wider constraints of the CCG's legally responsibility to remain fiscally responsible.

Category: Not Routinely Commissioned.

DEGENERATIVE KNEE DISEASE

The most common cause of generalised knee pain is osteoarthritis (OA). OA is the result of progressive degeneration of the cartilage of the joint surface. Meniscal tears and other structural changes including osteophytes, cartilage and bone marrow lesions are common characteristics of knee osteoarthritis. The condition is also known as degenerative knee disease.

The relationship between degradation of the joint surfaces and knee osteoarthritis is unclear. Imaging abnormalities of the knee surfaces are common and are known to exist in pain-free knees as well as symptomatic patients.

Degenerative knee disease is an inclusive term, which many consider synonymous with osteoarthritis. The term degenerative knee disease is used to explicitly include patients with knee pain, particularly if they are >35 years old, with or without:

– Imaging evidence of osteoarthritis

– Meniscus tears

– Locking, clicking, or other mechanical symptoms except persistent objective locked knee

– Acute or subacute onset of symptoms

Symptoms include pain and stiffness, and may include mechanical giving way, clicking or locking. These may impair a patient's ability to perform activities of daily living and recreational activities.
Conservative treatments aimed at reducing the symptoms include patient information (https://www.arthritisresearchuk.org/arthritis-information.aspx), weight loss and physical therapy. NICE advises that pain relief medication, physiotherapy, arthrocentesis and intra-articular corticosteroid injections may also be beneficial if the pain is moderate to severe.

Arthroscopic Knee Surgery

Arthroscopic knee surgery is an established and common treatment option and may include arthroscopic lavage (also called 'arthroscopic washout'), arthroscopic debridement (in combination with lavage) and arthroscopic partial meniscectomy (APM) which may be performed singly or in combination with debridement and lavage. An **arthroscopic knee** washout involves flushing the joint with fluid, which is introduced through small incisions in the **knee**. The procedure is often done with **debridement**, which is the removal of loose debris around the joint.

The meniscus is a piece of cartilage that provides a cushion between your femur (thighbone) and tibia (shinbone). There are two menisci in each knee joint. They can be damaged or torn during activities that put pressure on or rotate the knee joint.

Meniscectomy is the surgical removal of all (total menisectomy) or part (partial menisectomy) of a torn meniscus.

NICE recommends that arthroscopic lavage and debridement should not be used in knee OA without a *'clear history of mechanical locking'.*

APM is the most common knee procedure performed in the UK (151.2 procedures per 100,000 population).

Clinical effectiveness

There is published evidence showing that arthroscopic debridement with or without partial meniscectomy is not superior to conservative management.

The systematic review and meta-analysis by Brignardello-Petersen et al (2017) found that there was a short term improvement in pain and function at 3 months but this benefit was not sustained at 12 and 24 months. The short term benefit in pain and function did not translate to an improvement in Quality of Life (QoL).
The outcomes from the meta-analysis of low quality studies are reinforced by the findings from the FIDELITY randomised controlled trial (Sihvonen R, Paavola M, Malmivaara A, et al.) which compared surgery with sham surgery for degenerative medial meniscus tear. This study design corrects for the inherent bias and preferences of patients and carers who may have an initial preference for surgery (and consider non-surgical interventions to be inferior). Nearly half of the subjects in each group reported 'catching or locking symptoms'. Two years after surgery, there was no difference between the APM and sham surgery groups for any outcomes including:

- Composite knees scores including pain, function, disability and psychological outcomes
- Patient satisfaction
- Proportion of improved patients
- Reoperations (arthroscopy, tibial osteotomy or total knee replacement)
- Return to normal activity
- Adverse events
- Mechanical symptoms
- Meniscal tests
- The baseline presence of mechanical symptoms or meniscal tear did not result in APM being more favourable.

Safety

Knee arthroscopy carries a low risk of adverse events. These include:

- Venous thromboembolism (VTE) occurring in 5 per 1,000 procedures and

- Infection occurring in 2 per 1,000 procedures.
- It is not clear that the short term benefits associated with APM outweigh the low risks.

Cost Effectiveness

The most reliable study available concludes that the procedure is not cost effective despite including some indirect costs and only assessing costs effectiveness up to two years after surgery.
Since the cost effectiveness of knee arthroscopy treatment is highly dependent upon the clinical effectiveness, it is not possible for the procedure to be regarded as cost effective if it is only marginally clinically effective, especially in view of the evidence that it may, in a very small proportion of cases, be harmful.

Activity and finance

Across the BSOL CCGs area, there were 2,036 elective admissions for knee arthroscopy for patients with a diagnosis of degenerative knee disease (April 2015 - June 2017 inclusive). This excluded admissions where the procedures were part of a more complex knee operation such as ligament repair.
The most commonly performed knee arthroscopy procedure was ‘W822: endoscopic resection of semilunar cartilage NEC’. This accounted for 1,617 (79%) of the 2,036 admissions and cost £4,496,357.

INTERIM Eligibility Criteria

Knee arthroscopic lavage and debridement, with or without partial meniscectomy, will not be routinely commissioned for patients with degenerative knee disease (with or without radiographic and other symptoms of osteoarthritis, meniscus tears and mechanical symptoms).

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– Imaging evidence of osteoarthritis

– Meniscus tears

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This means **(for patients who DO NOT meet the above criteria)** the CCG will **only** fund the treatment if an Individual Funding Request (IFR) application proves exceptional clinical need and that is supported by the CCG.

Guidance.

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