

## Commissioning Statement Knee Arthroscopy

<b>Condition or Treatment:</b>	Knee arthroscopy for diagnostic or therapeutic reasons
<b>Background:</b>	<p>Knee arthroscopy is a surgical procedure for inspection and treatment of problems arising in the knee joint such as inflammation or an injury. It can include repair or removal of any damaged tissue or cartilage. It has been used extensively in the past to diagnose knee problems, but this is no longer appropriate due to the invasive nature of the procedure and the increasing access to less invasive diagnostic methods such as MRI.</p> <p>With such a common procedure, it is important to ensure that the evidence base is robust so that patients are not exposed to the risks without good evidence of benefit. It is important for the NHS to optimise the safety and cost-effectiveness of procedures to ensure maximum benefit for the risks and costs involved. The figures suggest that this could represent an area of improvement in cost-effectiveness and possible cost saving.</p> <p>Surgery should be performed in-line with BASK guidelines as supported by EBI2</p> <p><a href="https://baskonline.com/professional/wp-content/uploads/sites/5/2018/07/BASK-Meniscal-Surgery-Guideline-2018.pdf">https://baskonline.com/professional/wp-content/uploads/sites/5/2018/07/BASK-Meniscal-Surgery-Guideline-2018.pdf</a></p>
<b>Commissioning Position:</b>	<p>NHS North Yorkshire CCG does NOT routinely commission referral to secondary care for knee arthroscopy and will ONLY commission knee arthroscopy in adults where the following criteria are met:</p> <p><b>1) Washout and debridement in Osteoarthritis</b></p> <p>Referral for arthroscopic lavage and debridement should not be offered as part of treatment for osteoarthritis, (in line with NICE guidance) <b>unless</b> the person has a clear documented history of <b>mechanical locking</b> (2, 3)</p> <p><b>2) Diagnostic Arthroscopy</b></p> <p>Patients who have knee pain with persistent mechanical symptoms (locking, catching and intermittent sudden pain on movement) that have not responded to three months of initial non-operative care may have a symptomatic meniscal tear. These patients should be referred for further investigation via agreed local MSK pathways</p>

where MRI scan may be requested by a MSK specialist.

The majority of patients who present to primary care with knee pain **do not** require initial investigation with an MRI scan once red flag symptoms and signs have been excluded.

Patients who have a clear history of a significant acute traumatic knee injury and mechanical symptoms or who have a locked knee or present with red flags require referral without delay to secondary care and should undergo MRI investigation (where clinically appropriate).

As investigation of knee pain with locking should start with less invasive MRI scanning to identify meniscal tears and loose bodies diagnostic arthroscopy of the knee is therefore **not** routinely funded **unless** one of the following criteria apply:

- Significant knee pain having functional impact with diagnostic uncertainty following an MRI scan

**OR**

- Suspected malignancy, infection, bony fracture or avascular necrosis (i.e. urgent need for investigation)

**OR**

- Where there are contraindications to MRI scan

### **3) Therapeutic Arthroscopy**

The CCG will **ONLY** commission therapeutic knee arthroscopy in adults where:

- The patient has clear mechanical features of true locking or urgent need for treatment e.g. knee trauma causing fracture or ligament avulsion, red flag conditions

**OR**

- Clinical examination by a specialist or an MRI scan has demonstrated clear evidence of an internal joint derangement (meniscal tear, chondral flap, ligament rupture or loose body) with symptomatic and functional impairment **and** conservative treatment (including exercise, weight loss where appropriate,

	<p>physiotherapy and maximal analgesic medication) has been tried over a <b>3-month</b> period and failed <b>or</b> where it is clear that conservative treatment will not be effective.</p> <p>Summary to support criteria listed above from the ESSKA Meniscus Consensus Project can be found in Appendix A and in the link below:  <a href="https://www.yamaws.com/2016-meniscus-consensus-proj.pdf">2016-meniscus-consensus-proj.pdf (ymaws.com)</a></p> <p>Patients who are not eligible for treatment under this policy may be considered on an individual basis where their GP or consultant believes there is an exceptional clinical need that justifies deviation from the rule of this policy. Individual cases will be considered by the individual funding request panel</p> <p>NB: NHS North Yorkshire CCG also does NOT routinely commission a routine elective intervention on patients who have a BMI of 30 or above (classified as obese) or patients who are recorded as a current smoker – see Health Optimisation commissioning statement.</p>
<p><b>Referral Guidance:</b></p>	<p>Exceptional cases can be referred to the CCG’s Individual Funding Request Panel for prior approval.</p> <ul style="list-style-type: none"> <li>• HRW/SR GP Practices: <a href="https://ifryh.necsu.nhs.uk/">https://ifryh.necsu.nhs.uk/</a></li> <li>• HaRD GP practices: <a href="#">Referral Form</a></li> </ul>
<p><b>Effective From:</b></p>	<p>1<sup>st</sup> July 2021</p>
<p><b>Summary of evidence/ rationale:</b></p>	<p>For patients with non-traumatic knee injury, evidence shows that, on average, conservative treatment is as effective as arthroscopic knee surgery for some procedures. As long ago as 2002, a controlled trial addressing knee arthroscopy, using placebo or “sham” surgery as a comparator, showed no benefit (4).</p> <p>Partial meniscectomy surgery showed no advantage over sham in one RCT of patients aged 35-65 years with degenerative meniscal tears without osteoarthritis (5) and no advantage over physical therapy in two RCTs of older patients (&gt;45 years) with osteoarthritis (6, 7). In a systematic review of RCTs of young patients (mean age ~20 years) with a first occurrence of patellar dislocation, there was no conclusive advantage of surgical treatments compared with non-surgical treatments (8). In an RCT of patients with patellofemoral</p>

pain syndrome (18-40 years), mixed arthroscopic procedures and exercise resulted in equivalent improvements compared with exercise alone (9).

Although rates of post-operative complications are generally low higher rates have been observed in children and young people (10,11). There may also be future knee damage associated with arthroscopic procedures (12, 13) and a recent meta-analysis showed that the small benefit from arthroscopic knee surgery seen in middle aged or older patients with knee pain and degenerative knee disease was absent one to two years after surgery and was associated with an increase in significant harms such as deep vein thrombosis, pulmonary embolism, infection and death (14). The paper concludes

“The small inconsequential benefit seen from interventions that include arthroscopy for the degenerative knee is limited in time and absent at one to two years after surgery. Knee arthroscopy is associated with harms. Taken together, these findings do not support the practice of arthroscopic surgery for middle aged or older patients with knee pain with or without signs of osteoarthritis (14).

The Royal College of Surgeons/British Orthopaedic Association commissioning guide points out that “osteoarthritis may not be progressive and most patients will not need surgery, with their symptoms adequately controlled by nonsurgical measures as outlined by NICE (1).”

Regarding knee arthroscopy, it states that lavage and debridement should be considered in patients:

- With clear history of mechanical symptoms e.g. locking that have not responded to at least 3 months of non-surgical treatment
- Where a detailed understanding of the degree of compartment damage within the knee is required, above that demonstrated by imaging, when considering patients for certain surgical interventions (e.g. high tibial osteotomy)

The RCS/BOA guidance also states (in line with NICE guidance) that “Knee arthroscopy, lavage and debridement should NOT be offered for patient with non-mechanical symptoms of pain and stiffness.”

More recently, the BMJ has published two editorials about arthroscopic surgery for degenerative knee or knee pain (15, 16). They both explore the evidence for benefit and harm and point out that, although this is one of the most common surgical procedures,

there is no convincing evidence for the procedure being beneficial beyond the placebo effect.

A series of rigorous trials summarised in two recent systematic reviews and meta-analyses provide clear evidence that arthroscopic knee surgery offers little benefit for most patients with knee pain (14, 17).

The most recent linked paper is a comparison between exercise therapy alone and arthroscopic partial meniscectomy alone (without any postoperative rehabilitation) in adults with a degenerative meniscal tear (18). The authors found no between group differences in patient reported knee function at the two-year follow-up, but greater muscle strength in the exercise group at three months.

Over time, the indications have extended from locked knees in young patients to all patients of all ages with knee pain and meniscus tears of any sort; tears which, on magnetic resonance imaging, have proved poorly associated with symptoms (19).

Essentially, the editorials say, good evidence has been widely ignored. The most recent editorial comments that arthroscopic surgery for knee pain continues unabated, as disinvestments in ineffective treatments are generally slow (16, 20). It calls for local commissioners to respond appropriately to the evidence, because “system level measures that result in more appropriate use of scarce medical resources are urgently required”. In addition, it says that “in a world of increasing awareness of constrained resources and epidemic medical waste, what we should not do is ignore the results of rigorous trials and allow continuing widespread use of procedures for which there has never been compelling evidence”.

#### **Restricted use of MRI**

MRI is a good diagnostic tool (21) but may be inaccurate when used by less experienced staff (22) and its use is, therefore, restricted to secondary care or specialists working in locally commissioned MSK pathways.

*Adapted (and updated) from evidence review in Knee arthroscopy for chronic knee pain Cambridgeshire and Peterborough CCG31, with thanks to Dr Raj Lakshman, Consultant Lead in Healthcare*

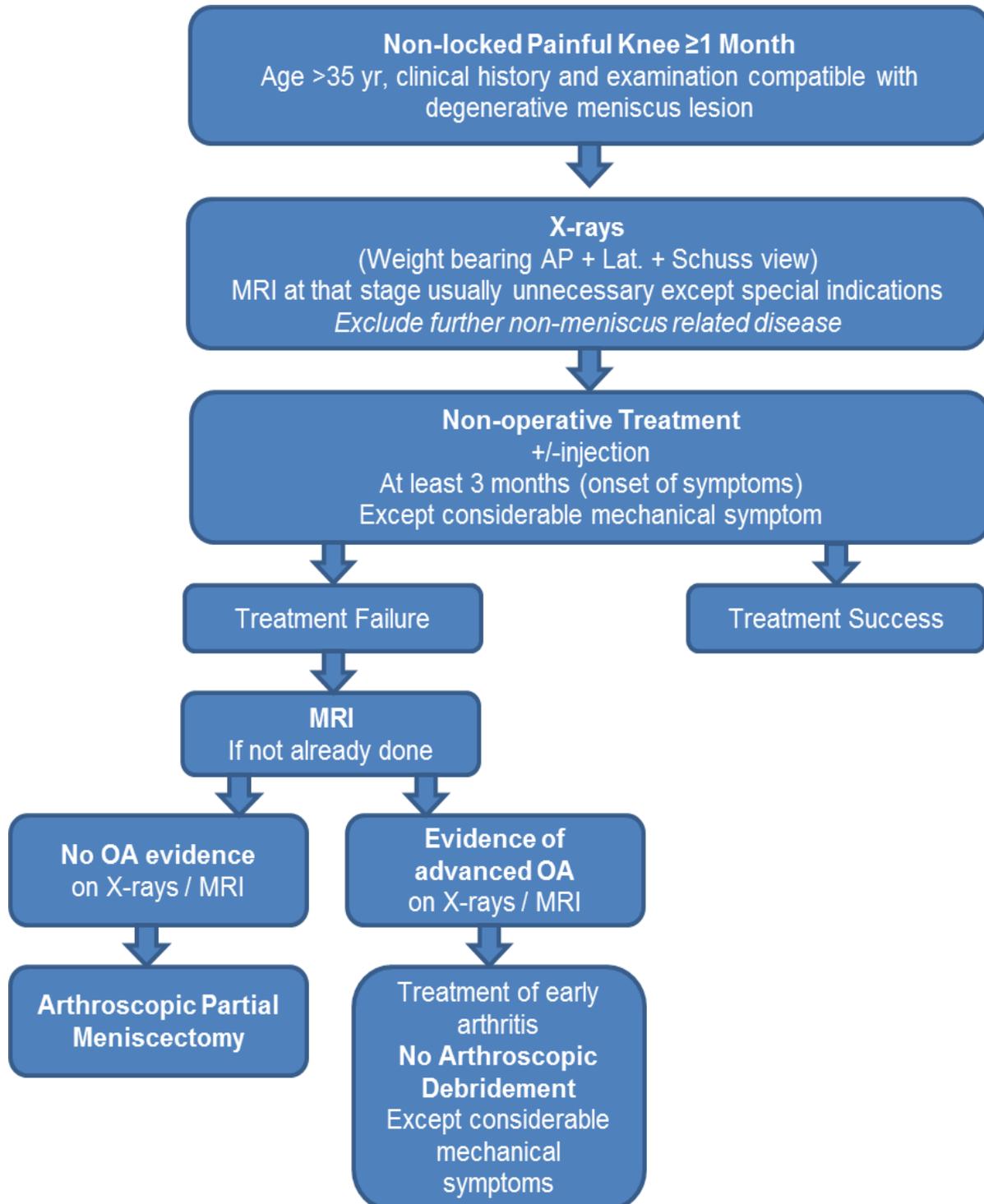
#### **Shared decision-making**

A letter following the recent BMJ editorial suggests that the overtreatment of knee pain with arthroscopy could be solved through the use of shared decision making (31). The NHS/BMJ aid

	<p>for knee arthritis clearly states that arthroscopy for lavage and/or debridement doesn't make much difference to pain, increase mobility around or stop symptom progression (32). The British Orthopaedic Association recently claimed that GPs were over-diagnosing patients with non-arthritic complaints and referring them on for surgery (instead of prescribing exercise) with the expectation that the keyhole procedure would “cure” the problem, so that too many patients were undergoing needless arthroscopy. Easy access to MRI is also likely to be leading to over diagnosis of meniscal tears and subsequent overtreatment.</p> <p>“Shared decision making for the management of knee pain should begin in the GP surgery and continue through the patient’s treatment.</p> <p>Given the research findings, it would be difficult to see why patients who are adequately supported in the decision-making process would be choosing surgery over physiotherapy.”</p> <p>Patient information leaflets available <a href="#">Arthroscopy</a> <a href="#">Knee cartilage injuries</a></p>
<b>Date:</b>	April 2021
<b>Review Date:</b>	July 2023
<b>Contact:</b>	Dr Christopher Ives, Governing Body GP/Acute Commissioning lead

**Additional Information/References:**

**Appendix A: ESSKA Meniscus Consensus Algorithm (34)**



**References:**

1. Painful osteoarthritis of the knee - Royal college of surgeons/BOA commissioning guide November 2013 <https://www.boa.ac.uk/standards-guidance/commissioning-guides.html>
2. National Institute for Health and Clinical Excellence – Arthroscopic knee washout, with or without debridement, for the treatment of osteoarthritis – guidance issue date: 22 August 2007. <http://www.nice.org.uk/IPG230>
3. Care and Management of Osteoarthritis NICE Clinical Guidelines CG177 Feb 2014 (Updated December 2020)  
<http://www.nice.org.uk/guidance/CG177/chapter/1-Recommendations#referral-for-consideration-of-joint-surgery>
4. Moseley JB, O'Malley K, Petersen NJ, et al. A controlled trial of arthroscopic surgery for osteoarthritis of the knee. *N Engl J Med* 2002;347:81-8.
5. Sihvonen R et al for the Finnish Degenerative Meniscal Lesion Study (FIDELITY) Group. Arthroscopic Partial Meniscectomy versus Sham Surgery for a Degenerative Meniscal Tear. *N Engl J Med* 2013;369:2515-24.
6. Katz J N et al Surgery versus Physical Therapy for a Meniscal Tear and Osteoarthritis. *N Engl J Med* 2013; 368(18): 1675-84.
7. Herrlin S V et al Is arthroscopic surgery beneficial in treating non-traumatic, degenerative medial meniscal tears? A five year follow-up. *Knee Surg Sports Traumatol Arthrosc* (2013) 21:358–364.
8. Hing C B, Smith T O, Donell S, Song F. Surgical versus non-surgical interventions for treating patellar dislocation. *The Cochrane database of systematic reviews* 2011.
9. Kettunen J A et al Knee arthroscopy and exercise versus exercise only for chronic patellofemoral pain syndrome: a randomized controlled trial. *BMC Medicine* 2007;5:38.
10. Jameson S S et al The burden of arthroscopy of the knee: a contemporary analysis of data from the English NHS. *J Bone Joint Surg Br.* 2011 Oct;93(10):1327-33.
11. Ashraf A et al Acute and subacute complications of pediatric and adolescent knee arthroscopy. *Arthroscopy*. 2014 Jun;30(6):710-4.
12. Petty C A, and Lubowitz J H. Does Arthroscopic Partial Meniscectomy Result in Knee Osteoarthritis? A Systematic Review With a Minimum of 8 Years" Follow-up. *Arthroscopy* 2011; 27(3):419-424.
13. Piedade S R et al Is previous knee arthroscopy related to worse results in primary total knee arthroplasty? *Knee Surg Sports Traumatol Arthrosc* 2009; 17:328–333.

14. Thorlund J B, Juhl C B, Roos E M, Lohmander L S. Arthroscopic surgery for degenerative knee disease: systematic review and meta analysis of benefits and harms. *BMJ* 2015;350:h2747. <http://www.bmj.com/content/350/bmj.h2747>
15. Arthroscopic surgery for degenerative knee: overused, ineffective and potentially harmful *BMJ*2015; 350 doi: <http://dx.doi.org/10.1136/bmj.h2983> (Published 16 June 2015)
16. Arthroscopic surgery for knee pain. A highly questionable practice without supporting evidence of even moderate quality *BMJ*2016; 354 doi: <http://dx.doi.org/10.1136/bmj.i3934> (Published 20 July 2016)
17. Khan M et al M. Arthroscopic surgery for degenerative tears of the meniscus: a systematic review and meta-analysis. *CMAJ* 2014;186:1057-64.
18. Kise NJ et al Exercise therapy versus arthroscopic partial meniscectomy for degenerative meniscal tear in middle aged patients: randomised controlled trial with two year follow-up. *BMJ*2016;354:i3740.
19. Guermazi A et al. Prevalence of abnormalities in knees detected by MRI in adults without knee osteoarthritis: population based observational study (Framingham Osteoarthritis Study). *BMJ*2012;345:e5339.
20. Prasad V, Cifu A, Ioannidis JP. Reversals of established medical practices: evidence to abandon ship. *JAMA*2012;307:37-8.
21. Crawford R et al. Magnetic resonance imaging versus arthroscopy in the diagnosis of knee pathology, concentrating on meniscal lesions and ACL tears: a systematic review. *British medical bulletin* 2007;84:5-23.
22. Bryan S et al. The cost-effectiveness of magnetic resonance imaging for investigation of the knee joint. *Health Technol Assess* 2001;5(27):1-95.
23. Laupattarakasem W et al. Arthroscopic debridement for knee osteoarthritis. *The Cochrane database of systematic reviews* 2008.
24. Health Quality Ontario. Arthroscopic lavage and debridement for osteoarthritis of the knee: an evidence-based analysis. *Ontario health technology assessment series* 2005;5(12):1-37.
25. Reichenbach S et al. Joint lavage for osteoarthritis of the knee. *The Cochrane database of systematic reviews* 2010.
26. NICE Interventional Procedure Guidance 430. Partial replacement of the meniscus of the knee using a biodegradable scaffold. 2012.
27. NICE Interventional Procedure Guidance 162. Mosaicplasty for knee cartilage defects. 2006.

28. NICE Technology Appraisal 89. The use of autologous chondrocyte implantation for the treatment of cartilage defects in knee joints. 2005.

29. NICE Interventional Procedure Guidance 474. Arthroscopic trochleoplasty for patellar instability. 2014.

30. Knee arthroscopy for chronic knee pain. Cambridgeshire and Peterborough CCG policy approved Sept 2015

<https://www.cambridgeshireandpeterboroughccg.nhs.uk/health-professionals/clinical-policies-and-thresholds/clinical-policies/>

31. Arthroscopic surgery for knee pain; where is the shared decision making? Letter from Dr S Finnikin GP <http://www.bmj.com/content/354/bmj.i3934/rr/927387>

32. Osteoarthritis of the knee shared decision-making tool

<https://www.england.nhs.uk/shared-decision-making/>

33. NHSE/I Evidence Based Interventions (EBI) Programme

<https://www.aomrc.org.uk/evidence-based-interventions/>

34. ESSKA Meniscus Consensus Project

[2016-meniscus-consensus-proj.pdf \(ymaws.com\)](https://www.ymaws.com/2016-meniscus-consensus-proj.pdf)