Title	**Diagnostic Arthroscopy for Conditions of the Knee**
Agency	**ASERNIP-S, Australian Safety and Efficacy Register of New Interventional Procedures – Surgical**
	PO Box 553, Stepney 5069, Australia;
	Tel: +61 8 83637513, Fax: +61 8 83622077; asernips@surgeons.org, www.surgeons.org/asernip-s
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Aim

To assess the safety and effectiveness of arthroscopy in diagnosing knee conditions, compared with magnetic resonance imaging (MRI) and ultrasound.

Conclusions and results

Studies eligible for inclusion were those with an independent, blinded comparison of the index and reference test among consecutive or nonconsecutive patients. The search strategy identified 1140 potentially relevant articles, of which 21 were retrieved. Two systematic reviews were eligible for inclusion. Both were published in 2007 and compared the results of MRI and standard arthroscopy. One review focused on the diagnosis of meniscal lesions and anterior cruciate ligament (ACL) tears, while the other focused primarily on meniscal tears. Conclusions based on the two reviews are:

- For meniscal lesions and ACL tears, MRI is an effective diagnostic tool when compared with diagnostic arthroscopy. MRI has a high specificity and negative predictive value, suggesting that screening MRI studies can effectively rule out the presence of meniscal lesions and ACL tears and reduce the number of unnecessary diagnostic arthroscopies. MRI is useful when the results of a clinical examination are uncertain, and it is the most appropriate diagnostic screening tool to use before therapeutic arthroscopy.

- Arthroscopy should be reserved for patients with lesions treatable by arthroscopic methods.

- Safety outcomes were not reported in the included systematic reviews or in the primary studies covered by these reviews. Hence, it was not possible to assess the safety of arthroscopy versus other diagnostic procedures for diagnosing knee conditions. As with all surgical procedures, diagnostic arthroscopy may be associated with adverse events, including anesthetic complications. Diagnostic arthroscopy should be avoided if reliable, accurate diagnosis of knee pathologies can be achieved using noninvasiv procedures.

Methods

Studies were identified by searching BMJ Clinical Evidence, the York (UK) Centre for Reviews and Dissemination (CRD), the Cochrane Library, PubMed, and EMBASE from January 1977 to March 2008. An ASERNIP-S researcher extracted the data using standardized extraction tables developed *a priori*, and a second researcher checked the work.

Written by Tim Lathlean, ASERNIP-S, Australia