

Technical Note: A Novel Retractor For "Inside-Out" Meniscal Suture

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Abstract

The authors report a novel teaspoon retractor for assisting in the repair of posterior third medial meniscal tears. This technique has been practiced for several years and provides excellent visualization of the emerging sutures whilst protecting the soft tissues behind the knee.

TECHNICAL NOTE

The intermediate results of meniscal repair are favourable and practicing sports knee surgeons have a conservative approach to meniscal resection now that the longterm sequelae of meniscectomy are established.¹ The posterior third of the medial meniscus is commonly involved in tears and because of the difficulties of exposure and retrieval of sutures using the "inside-out" technique, new "all-inside" techniques are available that utilize bioabsorbable darts or arrows. These techniques are not without their complications including dart displacement and abrasion of the articular surface of the medial femoral condyle.²

The senior author favours an "inside-out" technique using special non-absorbable sutures which are directed arthroscopically through the meniscus, retrieved and tied outside the knee joint capsule. A small incision is made in order to retrieve the sutures and tie them under direct vision without soft tissue interposition. Posterior third meniscal tears are particularly difficult to manage in this way as the suture needles are flexible, to aid passage arthroscopically through a guide, and they often become caught in the medial head of gastrocnemius, making retrieval problematic.

The authors make a small incision posterior to the medial femoral condyle and after dissection to knee joint capsule a teaspoon is passed behind the condyle to protect the soft tissues of the popliteal fossa from injury during needle passage. The curved surface conforms to the condyle and the flexible needles are easily retrieved when they penetrate the capsule because they are deflected out of the wound (figures 1 and 2).

Figure 1

Figure 1



Figure 2

Figure 2



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References

1. Englund M, Lohmander LS. Risk factors for symptomatic knee osteoarthritis fifteen to twenty-two years after meniscectomy. *Arthritis Rheum.* 2004; 50: 2811-9
2. Ross g, Grabill J, McDevitt E. Chondral injury after meniscal repair with bioabsorbable arrows. *Arthroscopy* 2000; 16: 754-6

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