Medical Memoranda

Easier Meniscectomy

Brit. med. J., 1966, 1, 1280

Excision of the medial meniscus of the knee is one of those operations which can at times prove difficult even for the most experienced surgeon. I suspect that many of the unsatisfactory results following meniscectomy are due to damage to the articular cartilage on the medial tibial plateau caused by long-drawn-out battles to detach the posterior pole of the meniscus in a tight knee.

The cause of the difficulty is, of course, that in tackling the posterior attachment through an incision in the front of the joint one is trying to divide the meniscus from the capsule in the coronal plane by using a knife which can of necessity only deviate a few degrees from the sagittal plane—in other words, it is difficult to “get round the corner” at the back of the joint.

It is possible, of course, to make a separate incision behind the medial ligament to approach the posterior horn in difficult cases, but the necessity for this can be avoided by using the following simple method.

OPERATIVE TECHNIQUE

The anterior horn of the meniscus is approached and divided in the usual way. In cases where the diagnosis is not in doubt I prefer to use a horizontal incision, sited below the infrapatellar branch of the saphenous nerve which is retracted upwards,

FIG. 1.—A dissector is used to indicate the point at which the tenotome is to be passed into the joint.

rather than a vertical incision which usually divides the nerve. Dissection of the meniscus from its attachments to the capsule and medial ligament is continued backwards until the “postero-medial corner” of the joint is reached.

With a dissector pushed against the capsule from within as a guide (Fig. 1) a small nick is made in the skin in the joint line just behind the posterior border of the medial ligament. A Robert Jones tenotomy knife, the shoulders of which have been ground down for $\frac{1}{2}$ in. (1.3 cm.) to give it a longer shank, is passed through this incision into the joint, below the Langenbeck retractor which is used to expose the back of the joint.

By working this knife in the coronal plane the posterior attachment of the meniscus is divided until the point is reached where the meniscus is attached only by its posterior horn and can be swung across into the centre of the joint (Fig. 2). The tenotome is then withdrawn and the posterior horn divided

FIG. 2.—Dividing the attachment of the posterior pole of the meniscus.

from the front with a scalpel or chisel knife in the usual way. The tiny incision made for the tenotomy knife seldom needs suturing.

When dividing the meniscus from its posterior capsular attachment it is important to remember that if strong traction is made on its anterior horn the line of its attachment posteriorly will no longer be in the coronal plane but will become angled towards the sagittal plane; indeed, it is only because of this that we are able to excise the whole meniscus from the front of the joint at all. If due allowance is not made for this the meniscus will be divided too far anteriorly and part of the posterior pole will be left behind.

This method is intended for medial meniscectomy. On the lateral side of the joint meniscectomy is not so difficult, as the posterior position of the lateral ligament, and its lack of attachment to the capsule, enables such a good exposure to be obtained with a transverse incision that the posterior pole of the meniscus can be detached almost the whole way to the posterior horn under direct vision. If the tenotomy knife is used for lateral meniscectomy, however, care must be taken to avoid injury to the inferior lateral geniculate artery, which runs forward round the joint between capsule and synovium just above the level of the meniscus; this will result in a haemarthrosis, and has been known to lead to the formation of a false aneurysm (Fairbank and Jamieson, 1951).

I wish to thank Mr. F. C. Dyer, of the Department of Technical Illustration, R.N. Engineering College, Manadon, for preparing the diagrams.

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REFERENCE

Fairbank, T. J., and Jamieson, E. S. (1951). *J. Bone & Surg.*, 33B, 567.