INTRA-ARTICULAR GANGLION OF THE KNEE

Report of Two Cases

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Although the infrapatellar fat pad has been implicated in internal derangement of the knee (Hoffa 1904, Smillie 1970) and intra-articular ganglia of the cruciate ligaments have been described (Bromley and Cohen 1965), ganglia of the alar folds of the knee are so rare that they are previously unreported. Two cases of intra-articular ganglion have been found recently during arthrotomy of the knee.

CASE REPORTS

Case 1—A woman aged thirty gave a two years' history of a dull ache in the right knee with intermittent effusion. The symptoms were worse on exercise and kneeling. She had noticed a fullness on the lateral aspect of the knee. On examination there was a tense cystic area at

FIG. 1

FIG. 2

FIGS. 1 AND 2

Case 2. Figure 1—Drawing showing the position of the intra-articular ganglion arising from the alar folds. Figure 2—A photograph of the ganglion and alar fat pad.

the lower lateral aspect of the joint line, suggestive of a cyst of the lateral meniscus. At operation the cyst was found to extend to the alar folds, displacing the infrapatellar fat pad laterally. The mass was removed intact. The menisci and ligaments were normal. Histology revealed a multiloculated ganglion.

Case 2—A man aged thirty-one reported that since a twisting injury to the right knee during exercise ten years previously he had suffered frequent episodes of pain, swelling and instability. An acute episode five days before his admission suggested a meniscal tear. Arthrotomy revealed a multiloculated cyst lying within the alar folds (Figs. 1 and 2). The menisci and ligaments were normal. Histology revealed a multiloculated ganglion.

COMMENT

Ganglia have rarely been described in the knee, although commonly found at the wrist and ankle and often associated with a variety of nerve compression syndromes. A symptomless intra-articular ganglion attached to the anterior cruciate ligament was reported at routine necropsy by Caan (1924). Sjövall (1942) reported a multilocular ganglion arising from the posterior cruciate ligament at a point where the ligament was detached from its insertion into the tibia, the patient having a ten years' history of effusion with one acute episode of a fall during this period. Levine (1948) described a bilocular ganglion of the anterior cruciate ligament which gave rise to pain, swelling and instability of the knee. The patient, a man of twenty-three, had had an acute episode of twisting at the onset of symptoms. Bromley and Cohen (1965) reported a large (2.5 by 2.5 centimetres) bluish-white mass arising from the posterior cruciate ligament in a man of twenty-nine who had suffered acute and direct trauma to the knee. The histology of the mass revealed a multiloculated ganglion.

Oedema, hypertrophy and haemorrhage of the infrapatellar fat pad and alar folds are well documented, and may be associated with a complete and displaced longitudinal tear of the medial meniscus (Smillie 1970), the displaced tissue obtruding on the space normally occupied by the fat pad. In neither of the cases described here was meniscal damage seen. Nevertheless trauma may be a factor in the etiology of intra-articular ganglia of the knee. The origins of ganglia at any site are obscure; they perhaps represent mucinous degeneration of connective tissue (Sarpyener, Ozcurumez and Seyhan 1968).

SUMMARY

Two cases of ganglion arising in the alar folds of the infrapatellar fat pad are reported. Both patients had symptoms of internal derangement of the knee, sufficient to justify operation.

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