ARTHROSCOPIC SURGERY IN THE VERY YOUNG

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New applications for the arthroscope continue to be found. Initially a diagnostic instrument used in the adult knee, its use has expanded to include younger patients and more elaborate procedures. The diagnosis of knee problems in the child is notoriously difficult clinically (Zaman and Leonard 1981; Morrissy et al. 1982; Ziv and Carroll 1982; Suman Stother and Illingworth 1984; Juhl and Boe 1986), making arthroscopy a natural choice in this group. Yet operative procedures using the arthroscope have not been commonly performed in children. We report two unusual cases of arthroscopic surgery performed in very young children.

Case 1. A four-and-a-half-year-old girl attended the orthopaedic clinic with a painful swollen knee. She had fallen two weeks previously twisting her knee. The subsequent swelling quickly settled without treatment, but recurred the day before she attended. The knee was swollen but stable and flexed from 5 to 110°. Radiographs and a bone scan were normal as were routine blood tests. As the signs persisted an arthroscopy was performed. This demonstrated a large displaced bucket-handle tear of an otherwise normal medial meniscus. A partial meniscectomy was carried out by the arthroscopic technique using smaller, but adult-sized Wolf and Acufex instruments. Although access was a little difficult, it was no worse than in many a 16-stone rugby player. Rehabilitation was prompt and uncomplicated, the patient returning home walking normally within 24 hours.

Case 2. A seven-year-old girl attended the orthopaedic clinic with a history of her knee 'going out of joint' on several occasions in the preceding three months. This was associated with mild pain but no swelling. There had been no significant trauma to the knee. On examination there was no effusion in the joint or tenderness around it. Manipulation of the patella was not resisted. The joint was stable but demonstrated a classical McMurray's sign medially. An arthrogram was performed and reported as normal. As the symptoms persisted, arthroscopy was performed and demonstrated a huge discoid lateral meniscus, which had rolled up or rippled in its central one-third, with an obvious hypertrophied edge and ridge which was catching. Using Acufex basket forceps this was easily refashioned into a normal, semi-lunar shape. There was no problem with access and the tourniquet time was less than 15 minutes. Rehabilitation was rapid with complete resolution of all symptoms within a week, the child returning home fully ambulant upon the day of surgery.

Discussion. In the child with knee symptoms, arthroscopy can help to elucidate the diagnosis, which may be a highly unexpected one, such as a bucket-handle tear in a girl aged four-and-a-half years, something we have never previously heard of. It is also clear that in the very young child arthroscopic surgery using smaller standard instruments is feasible for those adept at adult arthroscopic surgery. We are not aware that arthroscopic meniscectomy has previously been undertaken in very young children but our experience encourages us to draw attention to it.

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REFERENCES


