Unnecessary arthroscopy

Sixteen years ago the *Lancet* published an editorial entitled ‘Unnecessary meniscectomy’ (Noble 1976) in which attention was drawn to the fact that meniscal pathology is far more common than are the symptoms which allegedly arise from it (Noble and Hamblen 1975; Noble 1977). Clinical examination leads to an incorrect diagnosis in at least one case in four (Noble and Erat 1980) and the old adage that meniscectomy is not a benign procedure was re-emphasised (Huckell 1965).

Within a few years arthroscopy had become the ‘trendy operation’ of the 1980s. Such enthusiasm was often well placed, as technical expertise continued to revolutionise and miniaturise intra-articular surgery. There is, however, an increasing impression in certain minds that any pain from mid-thigh to mid-calf should be investigated by knee arthroscopy.

Joyce and Mankin (1983) drew attention to the awful errors which can arise if arthroscopy precedes radiography of the knee. Arthroscopic investigation of patellofemoral pain is very common “to check the condition of the cartilage on the back of the patella”. Such surgical enquiry is often worthless. Leslie and Bentley (1977) showed that only half of those reporting symptoms of chondromalacia patellae were found to have the condition at arthroscopy. Royle et al (1991) confirmed that observation, while reporting that chondromalacia of the retropatellar surface was to be seen in one-third of patients undergoing meniscectomy. Even if it is found, surgery probably makes little difference. Shaving is at its most effective on the chin and not in the knee.

Arthroscopy therefore has two principal indications. First, it must be considered if there is no alternative means of substantiating a diagnosis of intra-articular pathology. Secondly, and more important, its main role is in the surgical treatment of such pathology. Here enthusiasm must be tempered with caution. Jackson, Marans and Silver (1988) were the first to demonstrate reputedly the benefits of arthroscopy to patients with a degenerative knee. Whereas this is not to be decried, its limitations must be recognised and not regarded as an invitation to perform arthroscopy on every patient with an ache, and some sclerosis and a few osteophytes on a radiograph – even if they do have private insurance.

But what of substantiating the diagnosis? Boeree et al (1991) point out that MRI of the knee gives a diagnostic accuracy rate of 95% for meniscal pathology. This non-invasive technique does not supplant clinical judgement, it augments it, leaving the arthroscope to bring about a practical solution for the patient’s demonstrable (and verified) problem.

A prevalent view is that arthroscopy is an entirely innocuous procedure. That it is one of the safest (as well as commonest) orthopaedic procedures cannot be doubted, but that is not to regard it complacently as being without hazard. Bamford et al (1992) recently described the complications after 8500 arthroscopies, mainly to point out that most, but not all, were avoidable. Nevertheless, thrombo-embolic phenomena, infections, fistulae, compartment syndromes and instrument breakage cannot be totally prevented. Moreover, serious neurovascular consequences, amputation and even death have been reported (Sherman et al 1986; Gruenwald 1990).

Lastly, in these days of cost-effectiveness it is timely to enquire how many arthroscopies are clinically essential pre-operatively and have been beneficial to the patient postoperatively. It is right, although possibly unpopular, to ask whether arthroscopy can and should be carried out...
by any orthopaedic surgeon. It is probably correct to state that arthroscopy should only be undertaken by those adept at arthroscopic surgery, and that such skill is rarely God-given. It usually comes from formal training and regular practice. Here it is also right to remember warnings sounded by Sledge (1980) 12 years ago, indicating the consequences to articular cartilage of maladroit intra-articular manipulations. The clinical outcome of such damage may take a number of years to develop and thus far has caused little concern.

Studies are now urgently needed to establish the short-term benefits and long-term consequences of arthroscopy. As the late Professor Smillie once observed "gang warily".


cite{JONATHAN NOBLE

REFERENCES


