Book reviews

Complications in arthroscopy

Norman F Sprague (editor), 234 pages, Raven Press, New York, 1989
ISBN 0-88167-523-7

Arthroscopy is generally regarded as a procedure with negligible morbidity and a very low complication rate. With adequate technique and patient selection, the individual surgeon is only occasionally confronted with the unfortunate patient who has any complaint about the procedure per se or any early or late complication related directly to the arthroscopic examination.

It is difficult to get reliable information on the rate of complications related to diagnostic or therapeutic arthroscopy; the true number is most probably higher than the numbers reported. The incidence figures in this book are from three reported studies in the United States. A retrospective study in the form of a questionnaire in the early 1980s indicated an overall complication rate in 118,000 arthroscopies of 0.8 percent, when diagnostic and minor arthroscopic surgery were analyzed. In a later survey of the same design, but where more extensive surgery such as meniscal repair, ACL reconstruction and therapeutic shoulder arthroscopy were included, the overall complication rate was about the same, 0.6 percent. However, when these newer procedures were analyzed separately the rate was greater than 1 percent and in some procedures as high as 5–8 percent. In an ongoing prospective multicenter study including 21 experienced surgeons, 8,500 procedures have been recorded with a complication rate of 1.8 percent. A text on this topic is important to remind us that morbidity and complications do occur, to teach us how to recognize them, and to give information on the treatment of complications. Most important is to state how to limit the risk of complications based on extensive clinical experience as well as research.

The present book is well written and covers the field of interest from minor portal tenderness to sometimes disastrous infections, nerve or vascular injuries. Some case reports on malignant tumors around the knee remind us that a thorough preoperative patient evaluation is mandatory, to avoid very serious maltreatment, which in most cases is preventable.

Infection has been reported as the most common complication and this chapter is well worth reading. The suggested treatment of a septic joint includes arthroscopic removal of synovial debris, fibrin and adhesions, but not a synovectomy. All joint surfaces and recesses are irrigated thoroughly, after which two drainage tubes are inserted. This system is then used to distend the joint with antibiotic-laden saline intermittently, which prevents adhesions and permits local antibiotics. A continuous irrigation system is compared to a superhighway with flow between the tubes without irrigation of the whole joint.

The editing of this book is, however, hardly perfect; there are many examples of the same condition being described in several different contexts. The text is also a bit too wordy at times, and there are too many irrelevant illustrations, some of them of inferior quality. Most of the chapter on reflex sympathetic dystrophy of the knee is self-evident and in some sentences it is suggested that laboratory tests should be obtained to verify the diagnosis, which leaves the reader somewhat confused.

In spite of these shortcomings, the book can be recommended for giving the arthroscopist with reasonable experience a good review of the complications directly related to the procedure, as well as the associated anesthetic procedures and postoperative complications.

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Hip arthroscopy

Richard N Villar, 123 pages, Butterworth Heinemann, Oxford, 1992
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Reports on hip arthroscopy began to appear in the mid-1970s, most of them with a very limited number of patients. At our hospital we started to perform hip arthroscopy in the late 1970s and reported our early experiences in 1981.

The author has decided to try to explain why, in spite of the arthroscope now being an established part of orthopedics, the hip joint has evaded the clutches of the arthroscopist. I think he has succeeded. The positioning of the patient for the examination is difficult, often time-consuming, and sufficient distraction of the joint is sometimes difficult to obtain. Furthermore, the portals of entry are limited, as is the space for intra-articular surgical procedures. The anatomy of the hip does not permit complete access to all parts of the joint, the most difficult part being the anterior-inferior recess, which is the favorite location of loose bodies.

Although the author has performed about 200 examinations he has had some difficulties in producing an extensive text on the subject. The last 35 pages are devoted to nursing care, physiotherapy, patient instructions and other items only peripherally related to the subject. There are numerous repititions, notably a case report of an intra-articular bullet extracted through a posterior arthroscopic maneuver mentioned in almost every chapter! The fascination with this case has also resulted in the removal of intra-articular bullets being one of the 14 indications for hip arthroscopy!

One must realize that the intracapsular pressure is considerably increased during the procedure, which should not be allowed to last too long. In cases of avascular necrosis the procedure should be avoided, as the author correctly mentions in one context, but he considers this an indication for the procedure in another.

The illustrations from the image intensifier screen are of very poor quality, but otherwise the illustrations, most of them in color, are informative. I find the recommendation of irrigation of the joint with 0.5% bupivacaine at the end of the procedure worthwhile, but cannot understand why the patient needs one month of postoperative physiotherapy and why he, for the first 5 days, is allowed to put some weight on the examined extremity—but not enough to crush a tomato! The author obviously has a deep respect for the physiotherapist since he follows the general policy that no patient should undergo hip arthroscopy until physiotherapy has been tried and seen to fail. This policy seems to me doubtful in the case of, for example, an intra-articular bullet or a synovial chondromatosis!

The bibliography seems to be extensive and I think the book should be required reading for every orthopedic surgeon contemplating inclusion of the procedure in his diagnostic armament. I am also convinced that the next edition, after another 200 examinations, will be even more informative.

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