TOTAL KNEE ARTHROPLASTY IN THE PRESENCE OF
ACTIVE TUBERCULOSIS

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The ten-year result of a knee arthroplasty performed in
the presence of active tuberculous infection of the knee
is presented. This case suggests that it is feasible to obtain
a satisfactory outcome in these circumstances provided
the diagnosis is established and adequate postoperative
antituberculosis chemotherapy is given.
Case report. In September 1980 a 67-year-old man with
generalised rheumatoid arthritis underwent a Cintor
arthroplasty (Codman, Johnson & Johnson, Boston, USA) knee
arthroplasty for a painful right knee (Fig. 1). At the time
of surgery, rheumatoid factor was positive and he was
taking a systemic steroid, prednisolone 10 mg daily. On
two previous occasions intra-articular steroids had been
injected into the knee.
A satisfactory arthroplasty was performed and a
biopsy taken of macroscopically abnormal synovium.
Histological examination revealed areas of fibrinoid
necrosis and extensive granulomatous inflammation with
Langhans' giant cells. Ziehl-Nielsen staining was positive
for acid fast bacilli. Postoperative sputum examination
confirmed active pulmonary tuberculosis. Antitubercu-
losis chemotherapy was administered for one year,
consisting of a four-drug regime for the first six months,
rifampicin (600 mg), isoniazid (300 mg), pyridoxine
(10 mg) and ethambutol (1000 mg) daily. The ethambutol
was then discontinued and the other three agents
continued for a further six months.
Review at ten years, revealed the patient to be free
of symptoms with an excellent functional result as
assessed by Aichroth et al (1978). The radiographic
appearance ten years later remains satisfactory (Figs 2
and 3). There was no evidence of local or systemic
tuberculosis.
Discussion. Hip arthroplasty following quiescent tubercu-
llosis has been well documented (Hardinge, Cleary and
Charnley 1979; Kim et al 1979) but there are very few
reports in the literature of joint arthroplasty performed
in the presence of active tuberculosis (Besser 1980; Hecht
et al 1983; Wray and Roy 1987). Ours is the longest
review of a patient in whom knee arthroplasty was
performed in the presence of active tuberculous joint
infection. It is reported as an example for those who are
confronted by a similar management dilemma in the
early postoperative period. Provided the diagnosis is established early in the postoperative period, and adequate antituberculosis chemotherapy is instituted, the outcome of joint arthroplasty may not be adversely affected.

No benefits in any form have been received or will be received from a commercial party related directly or indirectly to the subject of this article.

REFERENCES


FABELLAR JOINT CAUSING PAIN AFTER TOTAL KNEE REPLACEMENT

LINDSAY LAIRD

Case report. A 68-year-old man presented in October 1988 with a four-year history of increasing pain in the right knee. The clinical and radiological signs were consistent with osteoarthritis and the symptoms did not respond to conservative measures.

In January 1989 a cemented press-fit condylar (PFC) total knee replacement (Johnson & Johnson, Brunswick, New Jersey) was performed. The patient progressed uneventfully and achieved 100° flexion of the knee. However, three months postoperatively he complained of pain behind the knee. A hard lump could be palpated in the lateral aspect of the popliteal fossa and pressure on the lump during flexion and extension caused increased pain.

The pain persisted and radiographs, taken at seven months, showed that the fabellar articular surface was parallel to the posterior condyle of the prosthesis (Fig. 1). Manipulation under image intensification confirmed their close apposition. The fabella did not appear to get caught on the prosthetic components during flexion and extension movements.

A needle was introduced into the fabellar joint under radiographic control and 2 ml bupivacaine was injected

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Fig. 1

Fig. 2

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