followed up 52 patients after knee revision. Infection was noted in 4% of patients, and 2 patients had aseptic loosening. Poor results were obtained in 29% of patients.

Shindell and colleagues,\(^7\) using the Noiles knee, reviewed 18 patients with knee replacement. In 56%, the operation failed within 32 months. No indications were given. Egsted, Olsen and Krogh\(^7\) reported on the use of the St. George hinge prosthesis in 38 knees. There was a loosening rate of 3.5% and an infection rate of 3.8%. Indications were not given.

The St. George hinge, the original Guepar prosthesis, and the original Noiles knees are now obsolete. Except with these components, loosening has not been a major problem. Extensor mechanism problems do exist and may in part be due to the fixed-axis nature of these prostheses. When most of these prostheses were used, however, the need to externally rotate the femoral component slightly was probably unrecognized. A rotating platform tibial component may help with patellar mechanics. The majority of extensor mechanism problems we experienced, however, related more to multiple surgeries with consequent problems with blood supply to the extensor mechanism than to the prosthesis.

Infection remains a concern, and the problems experienced in removing a cemented long stem may be formidable and make re-revision exceedingly difficult, although the advent of the modular hinge prosthesis may render this possible.

With the availability of posteriorly stabilized knees, constrained condylar knees and other knees with modular stems, some of the original indications used in this series no longer apply. The main indication that we still feel exists is anteroposterior instability, especially if there is a very large flexion gap in comparison to the extension gap, complete absence of the medial collateral ligament and lateral rotational instability due to complete absence of any lateral stabilizing structures. Complete absence of any functional extensor mechanism also requires a hinge prosthesis capable of slight hyperextension to allow a swing-through gait.

References


