Total knee arthroplasty in patients with coxitis knee

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Abstract

Purpose: Coxitis knee is a condition defined as secondary osteoarthritis of the knee joint due to contralateral or ipsilateral hip disorder. Total knee arthroplasty (TKA) has become a successful operation for relief of pain and improvement of function in patients with osteoarthritis of the knee. In this study, we investigated the usefulness of TKA for coxitis knee and the early outcomes of patients undergoing this procedure.

Materials and Methods: Five knees with coxitis were treated using primary TKA. The average patient age was 73.0 years. One patient had fusion of the contralateral hip joint due to tuberculous arthritis, three patients had functional leg length discrepancy due to severe osteoarthritis of the contralateral hip joint, and one patient is after total hip arthroplasty of the contralateral hip joint. The surgery was indicated because of advanced symptomatic osteoarthritis of the knee.

Results: Before surgery, the averaged femoro-tibial angle (FTA) was 167.8°, and after surgery this was improved to 173.2°. A constrained TKA implant was needed in two knees due to severe valgus deformity and insufficiency of the collateral ligaments. Functional leg length discrepancy was not improved by TKA, and the two affected patients required corrective shoes. None of the patients had serious complications during the postoperative period, and all became able to walk with cane. No radiolucent line or instability of the knee joint was seen in any of the patients.

Conclusion: TKA is a safe and reliable procedure for pain relief and functional improvement in patients with coxitis knee. However, functional leg length discrepancy is not improved by TKA. Further long-term observation for recurrence of knee joint deformity or instability will be required.