

A Case Report of Total Finger Joint Replacement Arthroplasty After Traumatic Amputation

S Y Fong,**MBBS, MRCS (Edin)*, C K Low,***FAMS, M Med (Surg), FRCS*

Abstract

Introduction: Joint reconstruction following trauma at the proximal interphalangeal or metacarpophalangeal levels remain a difficult problem in hand surgery. Function of the injured finger depends on the mobility and stability at these joints. In fingers amputated at these levels with joint destruction, the hand surgeon can perform either an arthrodesis or a replacement arthroplasty (either as an emergency or as a secondary procedure). Arthrodesis will give a stable pain-free joint, but at the cost of sacrificing mobility and even cosmesis. **Clinical Picture:** We report a case of traumatic amputation through the proximal interphalangeal joint (PIPJ) of the right middle finger. Arthrodesis of the PIPJ in extension using Kirschner wires was performed following replantation due to extensive periarticular soft tissue loss, so as to enable repair and healing of the extensor mechanism. This results in poor cosmesis and stiffness of finger interfering with function three months after surgery. **Treatment and Outcome:** A prosthetic total joint replacement of PIPJ was performed as a secondary procedure. Satisfactory hand function and finger movement ensued two years after the procedure, with no loosening or infection of the implant. **Conclusion:** Total interphalangeal joint arthroplasty is a useful secondary procedure, after the initial replantation, for finger amputation with periarticular soft tissue loss.

Ann Acad Med Singapore 2000; 29:110-3

Key words: Finger amputation, Finger joint implant, Finger replantation

* Medical Officer

** Consultant

Department of Orthopaedic Surgery

Tan Tock Seng Hospital

Address for Reprints: Dr Low Chee Kwang, Department of Orthopaedic Surgery, Tan Tock Seng Hospital, Moulmein Road, Singapore 308433.