



Title	Surgical debridement with prostheses retention for the treatment of acute periprosthetic infections following total knee arthroplasty
Author(s)	Zhang, C; Yan, CH; Ng, FY; Chan, PK; Chiu, KY
Citation	The 34th Annual Meeting of the Hong Kong Orthopaedic Association (HKOA), Hong Kong, 15-16 November 2014, p. 70
Issued Date	2014
URL	http://hdl.handle.net/10722/217574
Rights	Creative Commons: Attribution 3.0 Hong Kong License

SURGICAL DEBRIDEMENT WITH PROSTHESES RETENTION FOR THE TREATMENT OF ACUTE PERIPROSTHETIC INFECTIONS FOLLOWING TOTAL KNEE ARTHROPLASTY

Zhang C¹, Yan CH¹, Ng FY², Chan PK², Chiu KY¹

¹ Department of Orthopaedics and Traumatology, The University of Hong Kong, Hong Kong

² Department of Orthopaedics and Traumatology, Queen Mary Hospital, Hong Kong

INTRODUCTION: Periprosthetic infection after total knee arthroplasty (TKA) is difficult to treat. Surgical debridement with retention of prostheses is one of the valid methods.

METHODS: A retrospective review of all patients managed with such method from 1998 to 2013 is performed.

RESULTS: In all, 28 patients with 29 knees were included. The primary diagnoses included 24 osteoarthritis and 5 rheumatoid arthritis. Among these, 20 cases were infections after primary TKA and 9 after revisions. Also, 9 cases were early postoperative infections and 20 late haematogenous infections. The most common infecting organisms were methicillin-sensitive *Staphylococcus aureus* (34.5%) and methicillin-resistant *Staphylococcus aureus* (13.8%). During a follow-up of 52.4±45.2 months, 7 succeeded while 22 failed; for the latter, 14 required re-operations and 8 lifelong antibiotic suppression. All patients did not experience severe postoperative complications. The success rate of debridement was 24.1%. Statistical analyses showed no significant differences between the 2 groups on patients' age, diagnosis, time lag from symptoms onset to debridement, preoperative C-reactive protein, erythrocyte sedimentation rate, white blood cells, lymphocyte, haemoglobin, albumin, fasting glucose, random glucose and synovial fluid total cell count. History of diabetes mellitus or staphylococcal infections had no impacts on the success rate either. Successful cases had significant shorter duration between TKA and infection when compared with failed ones.

CONCLUSION: Debridement with prosthesis retention had a low success rate for acute periprosthetic infection in TKA. No significant prognostic factors could be identified, except that the infections happened at later stage had a higher failure rate.