

POSSIBILITY OF A LATE INFECTION OF TOTAL KNEE ARTHROPLASTY FOLLOWING DENTAL PROCEDURE

Tan Joo Boon¹, Ngim Hui-Ling Joanne¹, Zulkiflee Osman¹

¹Hospital Pulau Pinang

Introduction: Total knee arthroplasty is at risk for hematogenous seeding secondary to procedures that creates a transient bacteremia. Risk of infection associated with dental surgery especially multiple dental extraction is high with 68-100% prevalence of bacteremia. In addition, immunocompromised patient such as diabetes mellitus, radiation or drug-induced immunosuppression are more susceptible for bacteremia.

Discussion: 68 years old with multiple underlying medical illnesses of diabetes mellitus, hypertension, dyslipidemia and chronic pancreatitis had underwent right total knee arthroplasty for right knee osteoarthritis back in October 2007. Post-operative, functional status was well without any right knee pain. In July 2018, he was presented with short history of right knee for 3 days and unable to ambulate without any fever. On admission noted patient was having bad oral hygiene and noted 5 tooth decay after oral dental assessment. 5 tooth extraction was done. Subsequently patient was posted for wound debridement, arthrotomy washout of right knee with change of insert of right total knee replacement. Intraoperative right knee joint fluid and tissue for culture and sensitivity grow Haemolytic Streptococcus Group C which was sensitive to penicillin group of antibiotic. He was treated with intravenous antibiotic for 2 weeks and discharge with oral antibiotic after infective markers were reducing in trend. Patient was follow up monthly in clinic and responding well to oral antibiotic and infective markers were normalised. Right knee range of motion was 5-100 degree with active movement.

Conclusion: It is generally accepted that all patient underwent joint replacement surgery should maintain good oral hygiene. They should perform effective daily oral hygiene procedure to remove plaque to establish and maintain good oral health. Currently, recommended antibiotic prophylaxis regime is first generation cephalosporin or penicillin group antibiotic 1 hour preoperatively. Clindamycin is alternative antibiotic prophylaxis if patient is allergy to penicillin.