Peri-Prosthetic Joint Infection Following Total Knee Arthroplasty In Hospital Tuanku Ja’afar. A 5 year Retrospective Review

1Solayar GN, 1Chai CX, 1Lee MQ, 1Nurfarah Anis ZA, 1Tong RC, 1Goh YY, 2Ahmad AR
1International Medical University, Jalan Rasah, Seremban, Negeri Sembilan
2Department of Orthopaedics, Hospital Tuanku Ja’afar, Jalan Rasah, Seremban, Negeri Sembilan

INTRODUCTION:
Periprosthetic joint infection (PJI) is a major complication following total knee arthroplasty (TKA), incurring huge financial burden. The risk of infection and outcomes following total knee arthroplasty (TKA) in Malaysia is under-reported. In this study, we have attempted to determine the incidence of PJI following TKA and assess functional outcome in Hospital Tuanku Ja’afar (HTJ), a tertiary referral centre for a population catchment of over a million.

METHODS:
We retrospectively analysed patients who underwent primary TKA from January 2011 to December 2016. The primary outcome measure assessed was the incidence of PJI. Clinical data on PJI were collected and patients’ functional outcome were assessed with the Western Ontario and McMaster Universities (WOMAC)-Index.

RESULTS:
We analysed 204 patients who underwent primary TKA during the period. Of these, there 11 patients (5.4%) who met the criteria of PJI. Of these, 6 (54.5%) were superficial infections and 5 (45.5%) were deep infections. All superficial infections were successfully treated by antibiotics and superficial debridement alone. Patients with deep infection required at least one or more staged revision procedures. Patients with PJI had reduced WOMAC scores compared to patients who did not.

DISCUSSION:
While the PJI rates in HTJ are lower than previously reported in the country, there is still room for improvement. There is no universally accepted PJI rate and it continues to be a significant burden on the health system. This study also denotes the importance of having an arthroplasty registry as a source of data to audit arthroplasty practice in Malaysia and to improve the quality of care among our patients.

CONCLUSION:
The overall PJI from HTJ was 5.4% over a 5 year period following TKA. While this is an improvement from previously reported studies in Malaysia, further steps should be taken to reduce this figure further.

REFERENCES: