Total Knee Arthroplasty in Parkinson's Disease patients

¹Keshov Chabra; ¹Syed Addi Usmi Syed Othman, ¹Ammar Muizzuddin Manas, ¹Chew YW

Orthopaedic Department & Traumatology, Hospital Tuanku Fauziah, 01000 Kangar Perlis Malaysia.

INTRODUCTION:

Parkinson's disease (PD) is a debilitating neurological condition which require multidisciplinary management. Patients with PD usually have difficulty in walking, and to make matter worst, some of the patient have knee pain due to osteoarthritis. Historically, neurological disorder is one of the contraindications for total knee arthroplasty (TKA). We would like to report a case of severe knee osteoarthritis with underlying PD which was treated with TKA and has good outcome.

REPORT:

A 61 years old Malay gentlemen with comorbid of PD, presented with bilateral knee pain for 4 years.

His pain worsened from able to walk without aid to wheelchair bound. Examination of bilateral knee revealed crepitus, tender joint lines and reduced range of motion. X ray revealed bilateral Grade 4 knee OA. He underwent bilateral knee OA at an 8 months interval. Post op bilateral knee TKA, patient is able to walk without aid and pain free.



Figure 1: Pre-Operative bilateral knee radiographs



Figure 2: Post-operative check X-Ray of bilateral knee TKA

CONCLUSION:

TKA significantly improved clinical symptoms of PD patients. However, the probability of complications is high in PD patients after TKA. Nonetheless, if the clinical outcomes can be improved significantly, it's believed that TKA can be a good treatment for OA with PD, even if the degree of improvement in clinical outcomes is less than that in patients without PD. In our patient, bilateral knee TKA tremendously improved patient's quality of life. Patients with severe OA in PD had satisfactory functional improvement and pain reduction after TKA.

REFERENCES:

1. Ashraf, M. *et al.* (2017) 'Total knee arthroplasty in patients with parkinson's disease- a critical analysis of available evidence', *TheOpen Orthopaedics Journal*, 11(1), pp. 1087–1093. doi:10.2174/1874325001711011087.