

A CASE REPORT - PATHOLOGICAL FRACTURE IN USAGE OF SGLT2 INHIBITOR

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Introduction: In Malaysia, the prevalence of Type 2 Diabetes Mellitus has increased over the years especially in the older population¹. SGLT2 Inhibitor is one of the drugs used in treatment of Diabetes Mellitus Type 2. Most common hip fracture in elderly are neck of femur fracture and intertrochanteric fracture. We report a transverse subtrochanteric femur fracture which is an atypical fracture in elderly.

Discussion: A 68 years old Indian man with underlying diabetes mellitus, ischemic heart disease and hypertension under IJN follow up, patient has been on SGLT2 inhibitor for the past two years. He alleged tripped and fell due to slippery ground and landed on his right hip. He presented with right hip pain post fall and unable to ambulate due to pain. Clinical examination revealed swelling over right hip with limited range of motion due to pain. Plain radiology noted right transverse subtrochanteric femur fracture. This patient underwent long proximal femoral nail as fracture fixation. Figure 1: Pre-operative X-ray showing right transverse subtrochanteric femur fracture. Figure 2 : Post Operative X-Ray.

Conclusion: Sodium Glucose Cotransporter 2 Inhibitor (SGLT 2) inhibits proximal tubular reabsorption of glucose in kidney that reduces glucose plasma level. Giuseppina T.Russo et al reports that based on clinical data, it is suggestive that treatment with SGLT2 Inhibitor increases the risk of bone fracture³. SGLT2 Inhibitor may affect the homeostasis of calcium – phosphate due to the mechanism of action, this potentially have an effect on bone metabolism³. The usage of SGLT2 Inhibitor as treatment of Diabetes Mellitus in the elderly have to be used with caution as it increases the risk of fracture.