PLEASE HANDLE ME WITH CARE,I BREAK EASILY!

Paul Tan Boon King[1],Mohd Anuar Ramdhan Ibrahim[1],Haniza Sahdi[1],Sia Ung[1]
[1]Sarawak General Hospital

Introduction: Osteogenesis imperfecta is a hereditary condition due to abnormal type 1 collagen .

Discussion: Mr A is a 17 year old male, with a background of osteogenesis imperfecta with history of multiple episodes of fracture over his bilateral femur. His bilateral femur was held with K wires previously.He was then loss to follow up. However,he presented to us again in October 2019 after he loss control of his wheelchair and it went over a bump.On further history,he had never been able to walk since his childhood but he lives semi-independently with the help of his parents.He also has blue sclera,triangular like face,notable scoliosis and saber shin appearance of bilateral legs.There was no family history of osteogenesis imperfecta.He sustained close fracture over his right midshaft radius and ulna and right tibia fibula fracture.We decided for operation after exploring patients expectation. Osteogenesis imperfecta is detected around 1 in 20000 people.Type 1 collagen is the most important structural protein for our musculoskeletal system.With the abnormal cross linking,the bones become very thin and brittle.There are up to 8 subtypes,the most common being autosomal dominant Type 1 .He underwent K wiring of his radius ulna and osteotomy with K wiring of his right tibia as patient wanted to correct the deformity over his right leg.K wires were chosen as the medullary canal was too narrow for the usual TENS nail or telescoping rods .Post operatively,he was put on fiberglass over his right lower limb and there was no incidence of refracture after that.

Conclusion: Treatment of osteogenesis imperfecta fractures by surgery is an effective modality based on current literature eventhough it has a higher revision rate and is more technically challenging