

## Patient-Specific Talar Replacement Following Long-Term Complications of Treatment in Talar Body GCT: A Case Report

<sup>1</sup>Shamsuddin MAF, <sup>1</sup>M. Shahril.J <sup>1</sup>Azammuddin.A

<sup>1</sup>Foot and Ankle Unit, Hospital Sultan Abdul Aziz Shah UPM, Serdang

### INTRODUCTION:

Giant cell tumours (GCT) in the foot and ankle are rare, and there have been only a few reported cases involving the talus<sup>1</sup>. The treatment for a defect in the talus after curettage may vary from bone graft and bone cement to total talar replacement<sup>2</sup>. We are fortunate to have long-term information on bone curettage and cement complications in the case of talar body GCT.

### REPORT:

A 49-year-old woman visited the clinic with a complaint of severe progressing pain in her right ankle for the past year. Ten years ago, she had undergone surgery to treat a talar body GCT. Upon clinical examination, tenderness was observed at the anteromedial aspect of the ankle with painful dorsiflexion.

A plain radiograph revealed the medial half of the talar bone was filled with bone cement. There was a break in the subchondral medial talar body, resulting in reduced joint space on the medial side of the ankle joint.

Both clinical and radiographic findings indicate she has arthritis in her right ankle.



Figure 1: Plain radiograph of the right ankle.

She had a total talarctomy surgery and received a patient-specific talar replacement. The cartilage surface of the tibia plafond and navicular bone appeared healthy with no significant defect. The medial malleolus screw was not removed as we did the surgery via the anterior ankle approach.

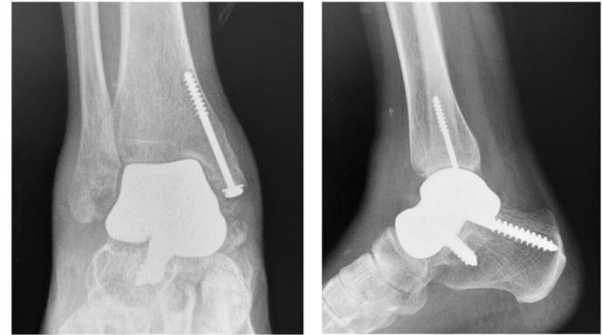


Figure 2: After surgery radiograph

After two weeks of surgery, she was allowed to bear weight using an orthosis until three months. She resumed full range of motion pain-free at six months.

### CONCLUSION:

Patient-specialized implants are now emerging as one of the treatments of choice, especially in the foot and ankle regions, as they provide better functional outcomes.

### REFERENCES:

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2. Yang et al. Three-dimensional printed talar prosthesis with biological function for giant cell tumour of the talus: A case report and literature review. World J Clin Cases.2021;9(13):31473156.doi:10.12998/wjcc.v9.i13.3147