

# Author Response: Staged Reconstruction of Post-traumatic Medial Malleolus Bone Defects Using Fibular Head Osteochondral Graft: A Report of Two Cases

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Dear Sir,

We would like to thank the Journal of Foot and Ankle Surgery (Asia Pacific) and its reader base, and we are grateful for the kind words in response to our manuscript titled "Staged Reconstruction of Post-traumatic Medial Malleolus Bone Defects Using Fibular Head Osteochondral Graft: A Report of Two Cases." We appreciate the discussion in this regard and wish to address the queries posed, one by one, through this communication.

- The patient reported in the case I had a remnant of the tip of the left medial malleolus, which was comminuted and had soft tissue attachment intact. Hence it was left *in situ* but was not amenable to fixation. At the time of the second surgery, the bone remnant was found to have been resorbed, and an island of sclerotic bone remained. This was excised, and reconstruction was planned. The patient reported in case II had complete medial malleolus bone loss.
- To avoid injury to the common peroneal nerve, it was isolated and adequately protected in its course, proximally and distally, during the initial part of the surgery. The fibular head was then excised at the neck level. The fibular head graft is not a perfect match to fit into a medial malleolus defect. Hence, the articular facet of the fibular head was provisionally matched to the medial talar dome, maintaining the continuity of the ankle mortise, and the remaining prominent bone was marked and trimmed on a side table before final fixation. This could potentially leave a metaphyseal bone gap on the nonarticular side, which can be filled with a cancellous bone graft trimmed from the fibular head, as we did in our patients.
- It was deemed risky to fix the osteochondral fibular head graft with two cannulated screws as they could potentially fracture the graft; hence an additional K-wire was used for added rotational stability. Since the graft was nonvascularized, incorporation and

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restoration of strength would take longer than expected; hence the implants were removed after a duration of 2 years.

- The authors believe that adequate debridement can allow for primary flap cover, which is superior to delayed flap coverage. In our case, the decision to proceed with the primary flap cover was taken after satisfactory debridement. Moreover, the patient had adequate glycemic control and was on routine antibiotic prophylaxis; he recovered uneventfully.
- In the second case report, the patient was younger. Moreover, isolated injury of the posterior tibial neurovascular bundle doesn't preclude future reconstructions. Surgical management was staged in this case due to the associated injuries. Since the patient underwent microvascular radial forearm free flap coverage before osseous reconstruction, there was a well-healed pliable flap with no prominence of the implant at follow-up.

Yours sincerely,  
Dr Suneel Ramanujapuram, Dr Apurve Parameswaran