

# SCREW FIXATION OF STRESS FRACTURE OF THE ANTERIOR CALCANEUM PROCESS: A REPORT OF 2 RARE CASES

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## INTRODUCTION:

The anterior process of the calcaneum (APC) fractures is an injury that are frequently missed on initial examination due to similar clinical presentation to that of ankle sprains.<sup>1</sup>

## CASE SERIES:

Retrospectively from 2016 to 2018, APC fracture was not visible on conventional radiographs in 2 patients (*Table*). A magnetic resonance imaging (MRI) hence was obtained to confirm diagnosis (*Figure 1*). A lateral midfoot skin incision was made and fracture site was directly visualized with insertion of one headless cannulated screw (*Figure 2*). Both patients achieved complete resolution with AOFS Score of 100 and 87 respectively. At latest follow-up, patient 2 was still experiencing discomfort upon climbing upstairs.

and achieved satisfactory AOFS scores for both patients in this series.



**Figure 1:** Avulsion fracture on sagittal MRI for Patient 2.



**Figure 2:** Postoperative lateral view for Patient 2.

**Table**

Pt	Trauma	Time to	Fol-	Complaint
	Mechanism	Surgery	low-	Resolution
		(mo)	up	
			(mo)	
1	Inversion	18	8	Complete
2	Inversion	9	6	Complete

## CONCLUSION:

Recognition of the fracture depends on the awareness of its occurrence. In this small case series, extended diagnostics in cases of suitable fracture mechanisms is imperative in order not to overlook fractures of APC.<sup>2</sup> Operative therapy by internal fixation is a suitable treatment of these rare injuries.<sup>3</sup> Screw fixation of the large non-union fragment was required to facilitate healing

Resection of small avulsion fractures of APC however, has been otherwise indicated for small fragments of fractures.<sup>4</sup>

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