

## **The Osteochondral Lesions Of Talus In The Subtalar Joint Following The Intra-Articular Calcaneal Fractures**

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### **INTRODUCTION:**

The cartilage delamination was frequently associated at the posterior articular facet of calcaneus following displaced intra-articular calcaneus fractures. However, little is known about the osteochondral lesion of the posterior facet of talus (OLPT) following an intraarticular calcaneal fracture. This study is to report the prevalence and characteristics of these lesions.

### **METHODS:**

This study retrospectively reviewed 34 patients who had the intraarticular calcaneal fractures. The CT scan was used to preoperatively evaluate the fracture type, the presence, area of lesion, and severity of OLPT following the intraarticular calcaneal fracture. These data were recorded in accordance with Akiyama mapping system, Sanders, and Ferkel classification.

### **RESULTS:**

The OLPT was found as 94.1% from a total of 34 patients. The most common area of OLPT was antero-central part (26.5%) of posterior facet of talar surface in accordance with Akiyama mapping system. The most common fracture type was Sanders IV (44.1%). The most common severity of OLPT was Ferkel grade I (82.4%). The OLPT was predominantly associated in Sanders type IV fractures (46.9%;  $p = 0.412$ )

### **DISCUSSIONS:**

This study demonstrated the high prevalence of OLPT following the intra-articular calcaneal fracture. Most lesions were mild severity; however, there was a tendency of the association of lesion occurrence with higher grade of fracture severity. The OLPT may play an important role in the formation of post-traumatic

osteoarthritis of subtalar joint which can be found following the intraarticular calcaneal fracture.

### **CONCLUSION:**

The prevalence of OLPT following the intraarticular calcaneal fracture was very high. The preoperative evaluation of this lesion is recommended via CT. The lesion treatment may be encouraged to be performed during calcaneal fracture fixation for the reduction of post-traumatic osteoarthritis formation.

### **REFERENCES:**

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