

Letter Regarding: Anterior Heterotopic Ossification at the Talar Neck After Total Ankle Arthroplasty

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Dear Editor,

We read carefully and with great interest the study “Anterior Heterotopic Ossification at the Talar Neck After Total Ankle Arthroplasty” by Jung et al.⁵ They performed an interesting study on 54 ankles (52 patients) that were treated with total ankle arthroplasty (TAA) and 6 cases presented a heterotopic ossification (HO) as a complication.

The authors presented a new classification, which is a modified version of the one by Brooker et al.² (table 1; figure 1), a bisecting line of the talar prosthesis was defined as the line horizontally dividing the talar component into halves between the uppermost margin and the lowermost margin of the talar component in the lateral ankle radiograph. The Brooker classification is used worldwide, and numerous modifications have been proposed.⁸

The authors made a great contribution to the subject and will be useful for the elaboration of new studies. However, we have some considerations to make. The Brooker classification used plain anteroposterior (AP) pelvic radiographs to grade HO after THA, and it was shown that it has imperfect interobserver reliability³; however, it has many advantages, including its widespread familiarity, simplicity of use, and the ubiquity of AP pelvic radiographs after THA. This remains a widely cited and used classification system for management of and research on HO.⁴

There have been numerous reports of posterior ankle HO.⁶ In the Anghong et al.¹ series, the authors showed that 80% and 95.6% of ankles showed heterotopic ossification on anteroposterior and lateral views, respectively, and 97.8% showed evidence on either anteroposterior or lateral views, but they do not subclassify the lesions. We believe that anterior and posterior HO at the ankle can be subdivided into medial and lateral. To support this, we present unpublished data of a case that presented a talar anteromedial HO (Figures 1-8) after a Hintegra TAA and an anteromedial miniarthrotomy was done to treat it (Figures 9 and 10).⁷ We can see here that no HO is evident on the lateral and sagittal computed tomographic (CT) views, but being present in the AP view and coronal CT.



Figure 1. Anteroposterior view. Posttraumatic severe osteoarthritis on the ankle.



Figure 2. Preoperative lateral view.

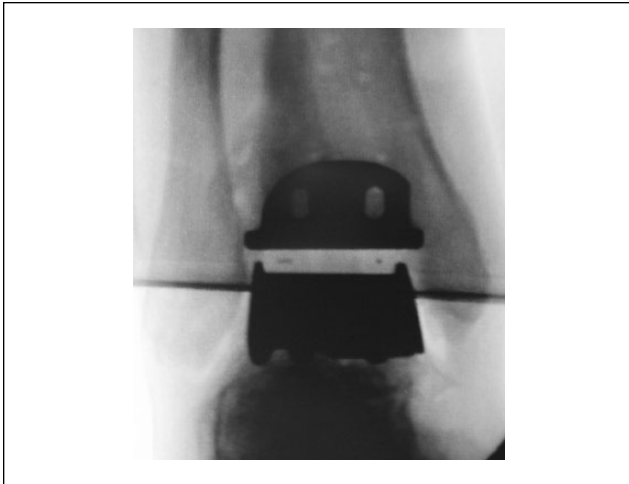


Figure 3. Anteroposterior postoperative radiography.



Figure 6. Lateral radiograph. No signs of anterior heterotopic ossification.

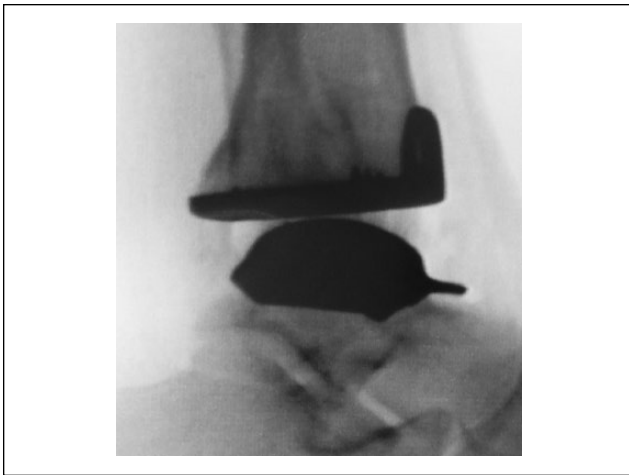


Figure 4. Lateral postoperative radiography.



Figure 7. Coronal computed tomography. Heterotopic ossification medial to talar component.



Figure 5. One-year anteroposterior view. Signs of heterotopic ossification on the medial side of the talar component.

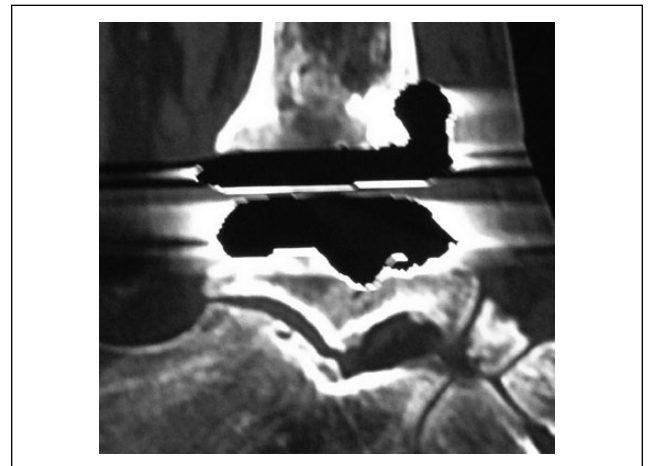


Figure 8. Sagittal computed tomography. No signs of heterotopic ossification on anterior ankle compartment.

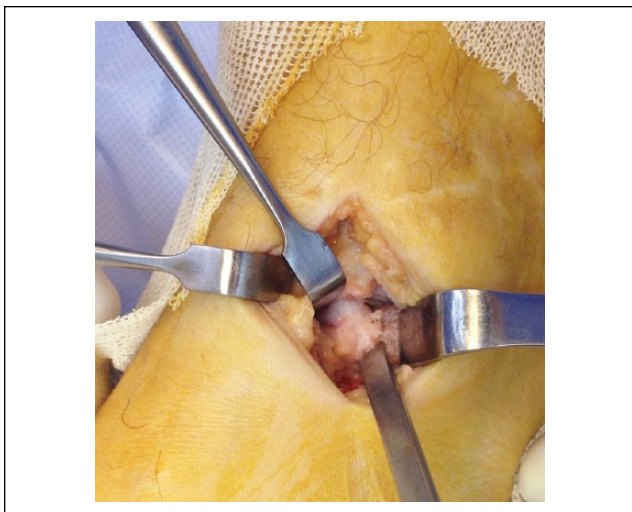


Figure 9. Anteromedial heterotopic ossification of talus.

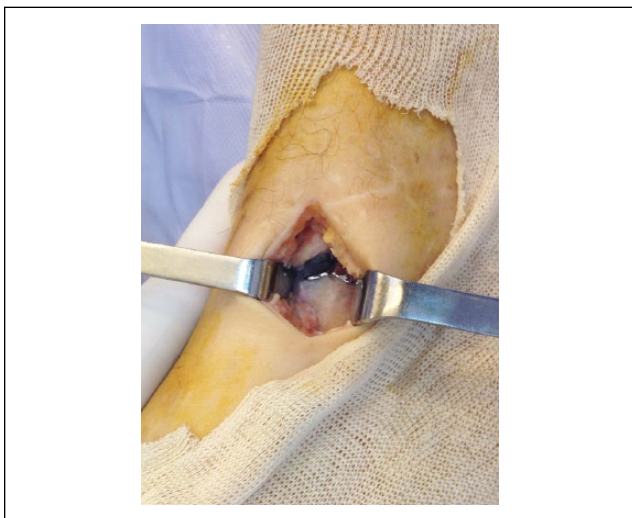


Figure 10. Complete resection of heterotopic ossification.

We think this can influence decision making when planning minimally invasive operative approaches. We believe that a possible solution for this issue could be the incorporation of AP views and redesigning the classification presented. We encourage the authors to do so.

On the other hand, on figure 4B, the authors showed the HO of the posterior compartment in a patient who had a Hintegra TAA but this does not coincide with the data

provided in table 2 where the only anterior and posterior HO corresponded to a Mobility prosthesis.

Sincerely,

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