

## Dr. Banal, *et al* reply

*To the Editor:*

We thank Drs. Leininger and Fields for their interest in our article<sup>1</sup>. First, we would like to make clear that “cortical thickening” is synonymous with “cortical disruption.” Second, it is right that, in our opinion, the “cortical disruption” provides the definitive diagnosis of stress fracture, but leads to an important decrease in sensitivity. According to our data, if the diagnostic criteria were adjusted to require cortical disruption, the sensitivity of ultrasonography would decrease to 39%. However, that is still better than the sensitivity of plain radiographs. The false-negative increases to 8, and negative predictive value decreases to 78%.

Thus, we believe that, in cases of clinical diagnosis of metatarsal stress fractures, a higher sensitivity is required, to avoid any misdiagnosis and possible complete metatarsal fracture, in cases of persistent weight-bearing. But, as we detailed in the discussion section, a complementary exploration of the plantar aspect of the foot would allow an increase in the sensitivity of this ultrasound sign.

Lastly, a multicentric study is now required in order to consider ultrasound as the gold standard in daily practice.

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### REFERENCE

1. Banal F, Gandjbakhch F, Foltz V, Goldcher A, Etchepare F, Rozenberg S, et al. Sensitivity and specificity of ultrasonography in early diagnosis of metatarsal bone stress fractures: a pilot study of 37 patients. *J Rheumatol* 2009;36:1715-9.

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