AUTHORS' REPLY

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Dear Sir,

We have considered Ekiz et al's⁽¹⁾ kind comments made with regard to our article, "Neurogenic heterotopic ossification after a stroke: diagnostic and radiological challenges".⁽²⁾ We acknowledge that ultrasonography is a useful tool for the evaluation of musculoskeletal lesions. Ultrasonography is widely available, is generally cheaper than computed tomography (CT) and magnetic resonance (MR) imaging, and has no ionising radiation, and the advantages of this imaging technique are widely known.

However, ultrasonographic evaluation is essentially operator dependent, and often, misdiagnosis may result from inexperience. In our institution, cross-sectional imaging (i.e. CT or MR imaging) is the next intuitive step of evaluation upon encountering an ossifying lesion of the hip on plain radiography. Moreover, the often equivocal findings of ultrasonography would eventually lead the clinician to order CT or MR imaging for further diagnostic clarity.

From a technical standpoint regarding ultrasonography, the acoustic shadowing encountered when imaging bony lesions often does not allow one to determine the amount of ossification of the lesion, and detailed evaluation is deferred to further CT or MR imaging. Further imaging allows for confident exclusion of other differential diagnoses such as bone tumours, which are often not well appreciated on ultrasonographic evaluation.^(3,4)

In summary, we feel that the role of ultrasonography in identifying cases of neurogenic heterotopic ossification is limited by the level of operator experience with regard to the imaging technique. Ultrasonography is superior in the evaluation of soft tissue lesions, but we feel that CT and/or MR imaging are often more reproducible, and these two imaging techniques have superior specificity when evaluating bony lesions.^(3,4)

Yours sincerely,

Chong Han <u>Pek¹</u>, Mei Chin <u>Lim²</u>, Ren <u>Yong¹</u>, Ho Poh <u>Wong¹</u>

¹Department of Orthopaedic Surgery, ²Department of Diagnostic Radiology, Tan Tock Seng Hospital, Singapore. chonghan.pek@mohh.com.sg

REFERENCES

- 1. Ekiz T, Yıldızgören MT, Yetişgin A. Musculoskeletal ultrasonography bypasses the diagnostic and radiological challenges in heterotopic ossification. Singapore Med J 2014; 55:604.
- Pek CH, Lim MC, Yong R, Wong HP. Neurogenic heterotopic ossification after a stroke: diagnostic and radiological challenges. Singapore Med J 2014; 55:e119-22.
- 3. Mintz DN, Hwang S. Bone tumor imaging, then and now: review article. HSS J 2014; 10:230-9.
- 4. Morley N, Omar I. Imaging evaluation of musculoskeletal tumors. Cancer Treat Res 2014; 162:9-29.