

Letter to the Editor

Letter to the Editor: Does the Use of Ultrasound Affect Contamination of Musculoskeletal Injections Sites?

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To the Editor,

We read the study by Sherman and colleagues [2] and congratulate the authors for their effort in drawing attention to the expanding use of ultrasound imaging in musculoskeletal practice. Their concern related with local contamination after ultrasound-guided interventions is also noteworthy.

While their findings (especially increased contamination with sterile gel use but not with nonsterile gel use) might be intriguing, they can only be considered partially clinically relevant. Their methodology of simulation for ultrasound-guided injections failed to reflect the actual clinical scenario. During such an intervention, depending on various factors (such as the size/nature of the target, nearby structures, injection material), the physician may prefer to use the direct or the indirect method [1]. In the latter one, as the intervention is not performed under real-time imaging, any risk of ultrasound gel-related contamination is not likely. This is important since many injections can readily be done using this indirect method.

On the other hand, even if the clinician prefers to use the direct method, it is usually suggested that the injection needle does not have any contact with the gel (or the sterile covering of the probe with a glove/condom). The only exception would be an injection close to a bony prominence where the injection needle needs to be guided through the sterile gel.

Overall, ultrasound-guided interventions still need to be evaluated, not only for therapeutic efficacy, but also with concern for infectious complications. The study models should better simulate the prompt interventional techniques.

(RE: Sherman T, Ferguson J, Davis W, Russo M, Argintar E. Does the use of ultrasound affect contamination of musculoskeletal injections sites? [Published online ahead of print August 28, 2014]. *Clin Orthop Relat Res*. DOI: 10.1007/s11999-014-3903-4.)

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