

## LETTER TO THE EDITOR



## Using wireless ultrasound during pandemic: Less contact may be the better

Pandemi döneminde kablosuz ultrason kullanımı: Daha az temas daha iyi olabilir

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## To the Editor,

At present, the importance of ultrasound utilization is better recognized by the physicians dealing with musculoskeletal pathologies. In other saying, the old term "ultrasound assistance" has evolved to the new term "ultrasound guidance."<sup>[1]</sup> Therefore, ultrasound can contribute to each step of the algorithms from provisional diagnosis to treatment. In the pandemic era, some problems may be encountered; for instance, in our country, ultrasound is mostly performed in a shared room instead of an individual examination room. Because we may not be sure whether the patients have COVID-19 infection, the usage of shared areas for physicians and patients must be limited. In the last decade, small portable ultrasound machines have gained popularity and have been utilized in emergencies to speed up the work.<sup>[2]</sup> Implementing wireless technology to handheld ultrasound machines has led to more practical scanning in various environments and conditions (Fig. 1).<sup>[3]</sup> Handheld ultrasound machines have some advantages due to not having cables, such as less contact with patients, not needing a second person for adjusting the image, and easy alignment of the treated area with the eyes.<sup>[4]</sup>

If we look at the disadvantages, the image's quality varies according to the brand of the device. Some brands offer image quality close to standard ultra-



Figure 1. Different brands of wireless ultrasound machines.

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sound devices, but this is reflected in the cost. Another issue worth mentioning is the need to covering the wireless probe with disposable stretch film or latex gloves and using an antiseptic solution or sterile gel as a medium for transmission for both providing sterility and protecting the probe itself; hence, the device is requiring contact with the patient. Another critical issue is the unclarified and possibly disadvantageous aspect of handheld ultrasound machines is their reliability. Considering the variability of ultrasound machines, the evaluation of these machines' consistency with standard ultrasound devices is essential. A recent study compares the handheld device with standard ultrasound for assessment of tendons and peripheral nerves, studies demonstrating intra-, inter-rater, and inter-machine reliability on different anatomical structures with larger sample sizes a necessity.<sup>[5]</sup> It is predicted that wireless ultrasound technology will be in more of life soon.

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