

Guest editorial: Musculoskeletal ultrasound

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Over the last two decades, musculoskeletal (MSK) USG has established itself as a versatile and precise imaging modality in the fields of radiology, sports medicine, and rheumatology. It has become increasingly popular and, without doubt, has become an imaging modality of great value in the diagnosis of MSK disorders. In fact, it has gained its rightful place in literature, along with MRI. Cost-effectiveness and ready availability are its biggest advantages in several clinical settings. The real-time capability of USG in conducting dynamic studies in areas like the shoulder and for the carpal tunnel syndrome is a very big asset. That it is possible to make a quick comparison with the contralateral side, is of great help in many difficult situations.

Modernization and sophistication in machine technology have increased spatial resolution so much so that it is often said to be superior to MRI.^[1] This has resulted in better understanding of the anatomy and the pathophysiology of many disorders, thus aiding in taking vital decisions regarding surgical interference, conservative management, etc. Indeed, one can say that the advances in MSK ultrasound are to be seen to be believed!

One of the major advantages that MSK ultrasound has over MRI in the assessment of tendons and nerves, is the availability of high-frequency probes, which allows us to evaluate the individual fibrils. Added to this, are the ease and speed with which a study can be completed. Needless to say, MSK USG is less 'taxing' to the patient's pocket! Multiplanar imaging is yet another major advantage. In a nutshell, it may be said that not one but many factors make MSK USG a very welcome addition to the field of orthopedic imaging. It has now become the technique of choice in patients with orthopedic hardware and implants and is also

the preferred technique in the pediatric population, where anesthesia, sedation, and radiation are major issues with other imaging modalities.

The role of color/power Doppler is also well-established in MSK USG. Increased color flow helps in the evaluation of inflammatory lesions. Its use in studying healthy callus during bone healing further aids in the follow-up of patients.

The ability to perform interventional procedures under USG guidance (aspiration of fluids, removal of foreign bodies, and biopsies) is more than an advantage. It has saved many a patient from unnecessary surgical procedures.

I deem it a great honor to be the guest editor for this symposium on MSK USG in the August and November issues of the *Indian Journal of Radiology and Imaging*. Various experienced contributors have shared their views in the articles that follow and I am sure that these will make for stimulating reading.

I sincerely thank Dr. Bhavin Jankharia, the Editor-in-Chief, for this opportunity and thank all the contributors for their inputs. I also thank Dr. Mukund Joshi for guiding us.

Reference

1. Levon N. Nazarian. General concepts of musculoskeletal ultrasound: A practical hands-on approach. CME audiovisual hand out-AIUM.

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