

Piedmont Orthopedics
300 West Northwood Street
Greensboro, NC 27401
(336) 275-0927



Musculoskeletal Ultrasound

What Is It? How Can It Help Your Doctor Administer a Pain Injection?

by Michael Hilts, MD

Musculoskeletal ultrasound is an advanced imaging technique that uses sound waves to guide injections for pain, especially in locations that are difficult to access.

This imaging method also can be used to diagnose the cause of pain in an area of the body. To learn how it is used for diagnosis, see separate story [here](#).

How is this imaging technique used in injections for pain?

Musculoskeletal ultrasound is used to help the physician direct injections for pain to a precise location in the hip, tendon sheath and small joints. Ultrasound is an alternative to fluoroscopy, an x-ray machine that also can be used to guide the physician.

What are the advantages of using ultrasound for this?

First and foremost, the patient avoids the radiation exposure of fluoroscopy. Second, the doctor can see blood vessels and nerves on the screen as the injection is administered and thereby can avoid those areas, minimizing complications. Third, because we can see those sensitive structures in real-time and avoid them, accuracy is improved and the patient may experience less pain. As a doctor, I know where I want to target the injection and, using ultrasound, I can guide it to that precise spot.

Where is this technique used?

It works particularly well in small joints, such as the AC joint at the end of collarbone and small joints in the hand and wrist. It also is very helpful in guiding an injection into the area between the tendon sheath and the tendon, especially when the tendon sheath is swollen. We also use it to guide injections in the hip joint.

Is it also used in diagnostic injections?

Yes, we sometimes will inject a numbing medication into an area, such as into the ball and socket area of the hip joint, to determine the origination point for the pain a patient is experiencing. Ultrasound is very helpful in directing the numbing medication to the precise spot we have targeted in the hip joint.

What special training have you received in this technique?

In December 2012, I became the first physician in North Carolina to receive credentialing in musculoskeletal ultrasound from the American Registry of Diagnostic Medical Sonography (ARDMS). To receive this credential, I had to log more than 150 ultrasound cases (I have performed four to five times that number), take 30 continuing education credits in this technique and pass a credentialing examination.

How can I schedule an ultrasound-guided injection?

If you would like to schedule a consultation, please call our office at 336-275-0927.