Using Ultrasound for Diagnosis and Treatment

At UW Medicine Sports Medicine Center

This handout explains how ultrasound is used for diagnosis and treatment at the UW Medicine Sports Medicine Center at Husky Stadium.

What is ultrasound?

Ultrasound uses sound waves to create images of the inside of your body. The images are displayed on a monitor for your doctor to see.

How is ultrasound used in diagnosis?

Ultrasound is used like X-ray, computed tomography (CT), or magnetic resonance imaging (MRI) to diagnose health problems. The images show injuries or other problems in your muscles, ligaments, tendons, and nerves.

Ultrasound differs from MRI in these ways:

- You do not need to lie inside a tube during ultrasound.
- You can move your body during the ultrasound so that we can take images from different angles.
- Ultrasound costs much less than MRI.

How is ultrasound used in treatment?

Ultrasound is also used during treatments that involve injections. The images help your doctor guide the needle to the right place. Ultrasound can be used during:

- Joint injections
- Bursal injections (bursa is the soft tissue between 2 structures such as bone, muscle, tendon, and skin)
• **Peri-neural** injections (injections around nerves)
• Cyst *aspirations* (using a needle to remove fluid from cysts)
• Tendon *needling* (to treat a torn or painful tendon)
• Delivering blood products to tendons during *platelet-rich plasma* (PRP) injections or *autologous blood injections* (ABI)

**Who does the ultrasound scan?**

• **Diagnostic ultrasounds** are done by providers who are certified to do diagnostic scans.

• Most doctors at the Sports Medicine Center are certified to do **ultrasound-guided procedures**, except for injections that involve the neck and back.

**Is ultrasound safe?**

Ultrasound is a safe procedure. It does not use radiation, as X-ray tests do.

But, some injections that use ultrasound are not safe for patients who are taking blood-thinning medicines (*anticoagulants*) such as warfarin (Coumadin), heparin, clopidogrel, enoxaparin, and others. If you take a blood thinner, talk with your primary care provider before you schedule any treatments.

**Who can have ultrasound at the Sports Medicine Center?**

We use ultrasound for diagnosis or treatment of many tendon, bone, muscle, or nerve issues. The only ultrasound scans we cannot do are scans of the spine.

**What are other options?**

• For diagnosis, MRI, CT, and X-ray are other types of imaging studies.

• **Fluoroscopy** can also be used to guide a needle during treatment. But, fluoroscopy uses X-rays, which means there is some exposure to radiation during fluoroscopy-guided treatments.

**Is ultrasound covered by insurance?**

Yes, ultrasound is covered by most health insurance.