CALCIFIC TENDINITIS

Calcific tendinitis refers to a build-up of calcium deposits in a tendon. Calcific deposits are often small (usually about 1-2 centimeter in size) and are commonly located within the tendons of the rotator cuff. Occasionally, calcifications are located in other tendons, muscles, or ligaments. When the calcium builds up in the tendon, the pressure and irritation causes pain, which can be very severe.

What causes Calcific Tendinitis?

Physicians and scientists are not exactly sure what causes calcific tendinitis. While different theories exist, calcific tendinitis is most likely due to an injury that healed improperly. It is not due to dietary consumption of calcium or use of other medications or supplements. While the cause is currently unknown, calcific tendinitis often accompanies other pathologies including tendinitis and tears. The calcium, while very painful, is not harmful or indicative of any disease.

Symptoms of Calcific Tendonitis:

- Severe pain at rest and with motion
- May have associated weakness (due to tears, or pain causing muscle inhibition)
- Catching, clicking, and reduced motion of the shoulder
- Symptoms that come and go, usually without obvious injury

Stages of Calcific Tendinitis

- Formative phase: Formation of calcific deposits, usually non-painful.
- Resting phase: No apparent inflammation, with mild pain.
- Resorptive phase: Characterized by the body trying to break down the calcium deposits. This causes an inflammatory reaction, which is painful. This is the stage where most patients seek formal care.

How is Calcific Tendinitis Diagnosed?

The diagnosis of calcific tendinitis can be seen on plain X-ray and allows the assessment of location, density, and the extent of the calcific deposits. In addition, a diagnostic ultrasound can accurately pinpoint the location and size of the calcium and identify any other pathology such as tears. Ultrasound is also used to assist in removal of the calcifications.

How is Calcific Tendinitis Treated?

Calcific tendinitis is different than other tendon issues. Typically tendinitis will respond to rest, physical therapy, anti-inflammatories, and corticosteroid injections. Calcific tendinitis is unique in the sense that physical therapy tends to aggravate the condition and relief from corticosteroid injections are usually temporary. In fact, of those who get corticosteroid injections, 70% will have a recurrence of symptoms. The natural history of calcific tendinitis is that it will take anywhere from 6 months to 3 years for your body to clear it away. Therefore, the best evidence suggests that removal of the calcific densities will lead to the most timely and complete chance of long-term recovery.

Options to remove the calcific density include ultrasoundguided percutaneous needling and lavage and arthroscopic surgery. Ultrasound-guided needling and lavage is a simple procedure where the physician uses a needle and saline solution to break up and wash away the calcium deposit. It is performed using a local anesthetic and only takes a few minutes. This procedure is exceedingly successful in curing the condition (>90% success rate).

