Understanding the Frozen Ankle

Most people have heard of the condition known as a frozen shoulder. The medical term for a "frozen" joint is adhesive capsulitis. The diagnosis of adhesive capsulitis can apply to any joint that is painful and stiff with significant loss of motion. In this article, the concept of a frozen ankle or adhesive capsulitis of the ankle is reviewed.

One of the key features of adhesive capsulitis is the overall loss of both active and passive motion. Active motion refers to your ability to move the ankle up, down, and all around. Passive motion occurs when someone else (your physician, Physical Therapist, athletic trainer) moves the foot and ankle through the available range-of-motion without your help.

What causes a frozen ankle? Like adhesive capsulitis of the shoulder, the exact cause may be unknown. This is called primary or idiopathic adhesive capsulitis. Even though it is said that the cause is unknown, with primary adhesive capsulitis, there are some factors that increase your risk for joint problems like this.

Having diabetes heads the list of potential risk factors. In fact, up to 40 per cent of adults with Type 1 diabetes and 10 to 36 per cent of folks with Type 2 diabetes develop adhesive capsulitis of the shoulder.

Being a woman or an older adult (40 to 60 years old) also increases the risk of adhesive capsulitis. Injury or trauma to the shoulder may be the cause of secondary adhesive capsulitis. As the term secondary suggests, the shoulder condition occurs as a direct result of another problem like trauma.

The incidence of adhesive capsulitis of the ankle is much less than in the shoulder. And most of the time, adhesive capsulitis of the ankle is secondary to repeated ankle sprains or an ankle fracture. Risk factors for primary (idiopathic) ankle adhesive capsulitis do include diabetes as well as infection, heart disease, or autoimmune disorders.

All in all, a frozen ankle is a lot like a frozen shoulder. The symptoms are very similar. The underlying pathologic processes within the tissues appear to match up as well. Treatment is based on whether the patient is in the early, mid, or late stage of the condition. If there's been an ankle fracture, treatment begins with the lower leg being immobilized in an air splint or cast for six to eight weeks.

Physical Therapy is a key feature of treatment in all stages of adhesive capsulitis but especially after immobilization. The Physical Therapist mobilizes the ankle joint. Mobilization is a hands-on technique. The therapist moves (slides and glides) the joint surfaces in different directions to lubricate and stretch the joint capsule and move the joint.

In the early stages of acute adhesive capsulitis, joint mobilization may help decrease inflammation and prevent the formation of fibrous adhesions. The patient may be given an antiinflammatory medication or steroid injections. The patient is encouraged to keep moving the joint in order to maintain full joint range-of-motion. Of course, this type of treatment begins after the cast or splint has come off for those patients who fractured their ankles.

Failure to respond to conservative (nonoperative) care may mean surgery for that patient. The surgeon inserts an arthroscope into the joint to see what's going on and to correct the problem. This may mean removing loose fragments of bone or cartilage from inside the joint. This type of procedure is called arthroscopic debridement.
As the author of this review on adhesive capsulitis of the ankle points out, most of what we know about the diagnosis and treatment of ankle adhesive capsulitis comes from our understanding of the same process in the shoulder. But adhesive capsulitis occurs far less often in the ankle than in the shoulder. Not that much is known or has been reported on this problem. This may be one of the first articles to address the problem.

More studies are needed to set up specific diagnostic criteria for ankle adhesive capsulitis. Likewise, evidence-based treatment needs to be developed. Treating a frozen ankle as if it were a frozen shoulder may not be the best approach. But we won't know that until proper studies have been conducted and evidence presented.


Humpal Physical Therapy & Sports Medicine Centers provides services for Physical Therapy in Corpus Christi.