

TENDONITIS

Tendons are white, glistening, fibrous bands of collagenous bundles of parallel fibrils that serve to attach the muscles to their origins or insertions. They vary in length and thickness and may be round or flattened. They combine the virtues of great tensile strength with flexibility and almost total inelasticity. Except where they attach to the bone, tendons are sheathed in a delicate fibro elastic connective tissue called a synovial sheath. Larger tendons may have a stroma of thin internal septa. Tendons are poorly innervated, for the most part supplied only with sensory nerves whose sensory end organs are the specialized *Golgi tendon organs*.

Some authorities have assumed that soft tissue inflammation associated with a tendon is actually an inflammation of its synovial sheath and not of the tendon itself since it is fairly inert and sparingly supplied with blood vessels. *Tendonitis* (or *tenosynovitis*) produces a syndrome that includes inflammation along the tendon, soft tissue swelling (usually moderate), relatively high skin resistance overlying the involved tendon, and pain on

palpation. Minute calcific deposits may sometimes be found in association with the inflamed tendon and these may be an ongoing source of irritation. Such conditions are generally labeled *calcific tendonitis* or *peritenonitis calcarea*. Trauma, adhesions, arthritis, and infection of all kinds have been associated with inflammation of the tendon or tendon sheath. The most common clinical examples of tendonitis include bicipital tendonitis, tennis elbow, hamstring tendonitis, patellar tendonitis, and some forms of the carpal tunnel syndrome.

Treatment

Tendonitis responds well to treatment utilizing ice packing, soft tissue manipulation to break any adhesions, phonophoresis of topical anti-inflammatories, milking or stroking massage and low frequency electrical stimulation to increase circulation in the involved tissues (refer to Electrical Stimulation, Circulation Enhancement).