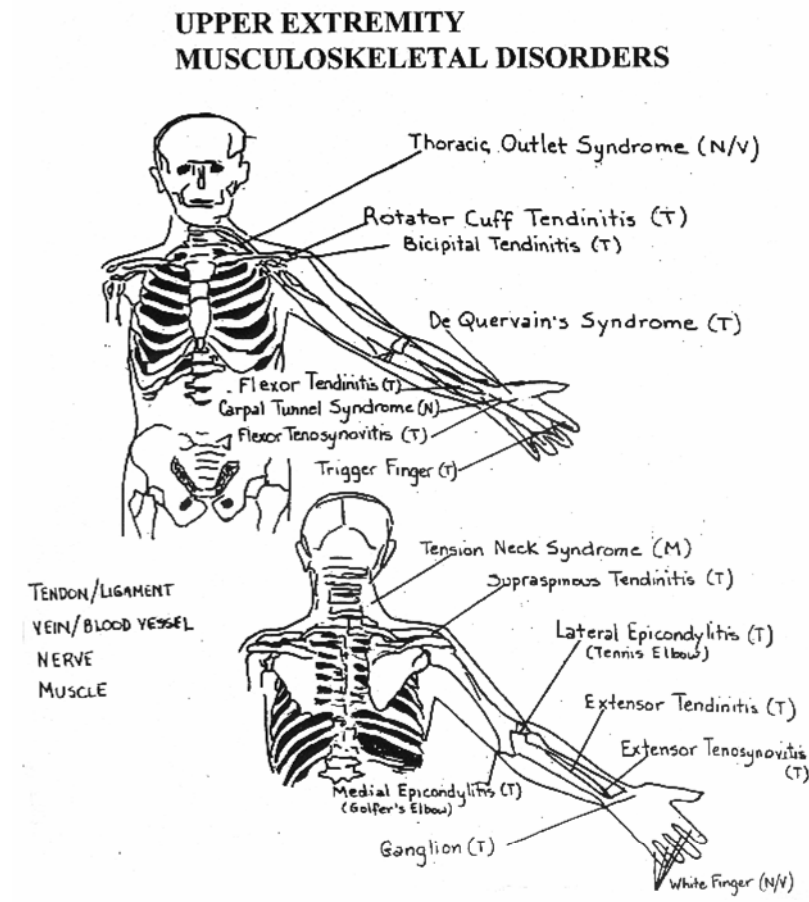


Upper Extremity Musculoskeletal Disorders

Musculoskeletal disorders that affect the body's upper extremities (neck, shoulder, arm, elbow, wrist, hand and/or fingers) are called *upper extremity musculoskeletal disorders*.

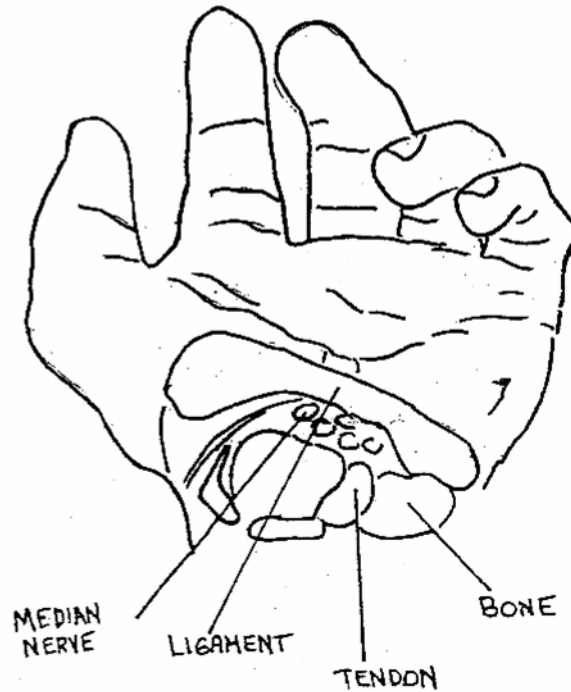


The names of particular injuries in this picture are followed by a letter in parentheses that indicates what tissue suffers damage in that particular injury: a tendon or ligament (T), a vein/blood vessel (V), a nerve (N), or a muscle (M).

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Carpal Tunnel Syndrome

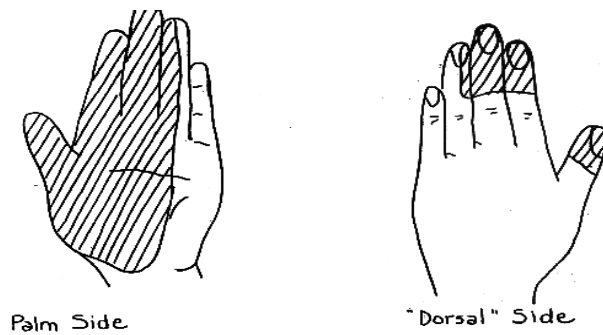
Carpal tunnel syndrome is one of the most talked-about musculoskeletal injuries of the upper extremities.



CARPAL TUNNEL SYNDROME

The carpal tunnel is a tunnel inside the hand, formed by carpal bones of the hand and a tough fibrous band through which nerves, tendons and blood vessels run to and from the hand.

In carpal tunnel syndrome, a swelling within the carpal tunnel puts pressure on the median nerve. This causes tingling ("pins and needles"), pain and numbness to occur in particular fingers and sections of the hand.

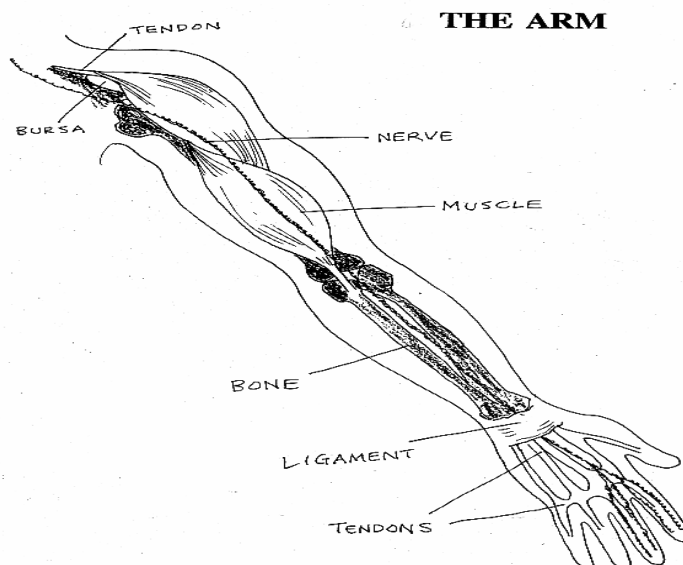


**SENSORY PATTERN OF
CARPAL TUNNEL SYNDROME**

The shaded area in this picture shows the areas of the hand that are affected by carpal tunnel syndrome.

Not all symptoms of pain, tingling or numbness felt in the hands are symptoms of carpal tunnel syndrome. Because nerves run the entire length of the arm, the squeezing or "impinging" on a nerve in the shoulder or elbow can result in pain being felt in the hand.

The Arm





Tendons, bursa, nerves, muscles and ligaments inside the arm can all suffer damage from overuse, repeated motions and other factors that can cause musculoskeletal injuries.

- A tendon is a narrow band that attaches muscle to bone.
- A bursa is a very thin, fluid-filled sac that helps reduce friction where tendons rub against other tissue such as bones, ligaments or other tendons.
- A nerve conducts electrical impulses, activates muscles into motion, and conducts sensation.
- A muscle is tissue composed of cells or fibers that affect movement of a part of the body (if either the blood or nerve supply to a muscle is interrupted, the muscle will get weaker and smaller).
- Ligaments are strong rope-like fibers that bind joints together.

Working in awkward postures, using repetitive motions, experiencing forces on the job, can all damage the soft tissues pictured here.