

Pain Insights

Courtesy of Joe De Santi, M.D.

NECK PAIN

Neck pain can certainly be a “pain in the neck” when it comes to functioning on a day to day basis. Since the structures of our neck are in constant use, it’s very hard to truly rest the neck.

Most common sources of pain arise from an acute injury to the neck, typically in one or more muscle groups or tendons. This is often seen in “whiplash” and rotational injuries which overstretch the muscles or tendons rapidly and cause tearing injuries. Since the muscles and their tendons are intimately involved in support and movement of the neck, these injuries can be quite painful and fairly restrictive from a functional standpoint. Most often splinting, anti-spasmodic, and anti-inflammatory medications are used to alleviate the acute pain and permit healing. Localized trigger-point injections can also be helpful in the acute setting. Physical therapy and a structured stretching regimen are also quite effective in preventing a relapse of these “positional” injuries, once returning to normal activity.

Other types of neck pain arise from degeneration or injury to the spinal column discs and ligamentous structures. Often these injuries are the result of chronic wear and tear of the joint, but they can also be seen in complex acute injuries of the neck. Often, these types of pain conditions produce neurological signs in the upper extremities because they impinge or press on the delicate structures exiting the spinal cord. Treatment often involves appropriate rest, immobilization, and anti-inflammatory medication. Occasionally injection therapy is used to alleviate troublesome areas that have prior scar tissue or have been re-injured. Surgery with or without fusion is sometimes required to limit motion, which is often the source of the pain.

The more serious and fortunately less frequent sources of neck pain are from complete tears of supportive ligamentous structures and bone fractures. These often produce chronic localized pain with or without neurological symptoms, depending upon the injury. Consultation with a spine surgeon is often required as well as surgery to stabilize the structures from causing further injury due to displacement or movement.

Pain can also occur in the neck due to systemic diseases and localized degenerative changes. The joints of the neck provide us with a wide range of

movement permitting tilt, rotation, flexion, extension and a complex interaction of all these motions. As a result, the bony surfaces can be injured acutely due to trauma or chronically as cartilage and ligamentous structures wear away or are mistakenly attacked by the body, as in the case of autoimmune illnesses like rheumatoid or psoriatic arthritis. Treatment for these conditions often involves combination therapy with biological medications, powerful anti-inflammatory medications and even opioid medications. A team approach to care is absolutely essential to the successful management of these types of neck pain.

Finally, the rare sources of neck pain include tumors and vascular disease. Many soft tissue, spinal or bone tumors in the neck are detected early because of the pain they produce while still quite small. Neurological symptoms are often common as the tumor may involve or encroach upon the spinal cord and/or its nerve roots. In the case of vascular disease, abnormal blood supply to the spinal cord or its nerves can lead to pain and neurological dysfunction. Additionally, aneurysms (abnormal balloon-like enlargements) in the vasculature can be a source of pain as they can compress nerve roots or cause erosions into bone over long periods. In situations involving these rare entities it is absolutely imperative you have a team approach to your care.

In summary, our neck can be a source of significant problem when we're younger due to trauma, overuse and re-injury. When we're older we tend to see problems due to weakness, degenerative change, systemic illness, and neoplastic disease. Therefore, a thorough assessment of the mechanism of injury and history behind the problem is essential to the correct diagnosis and treatment.