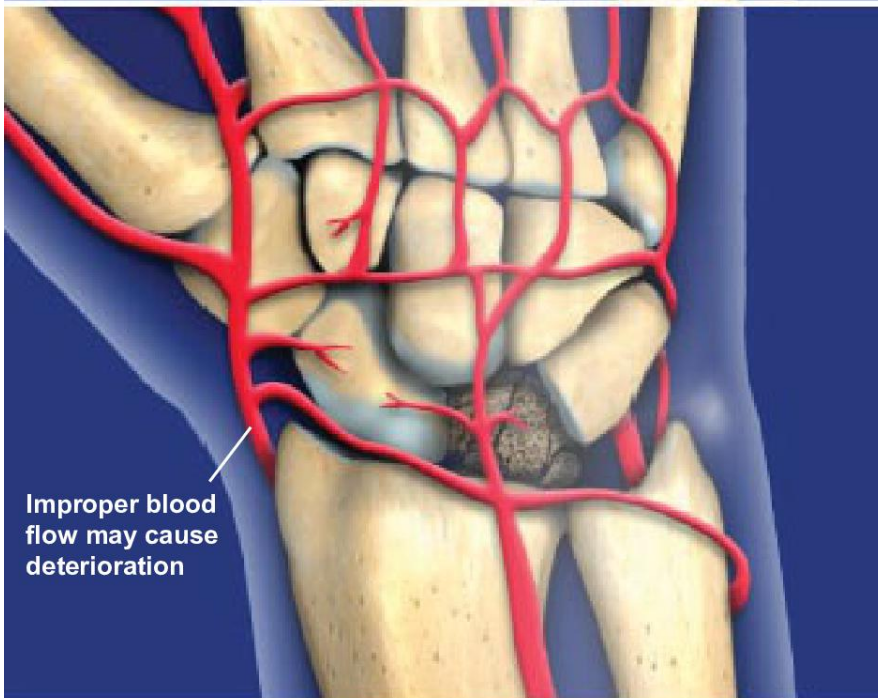
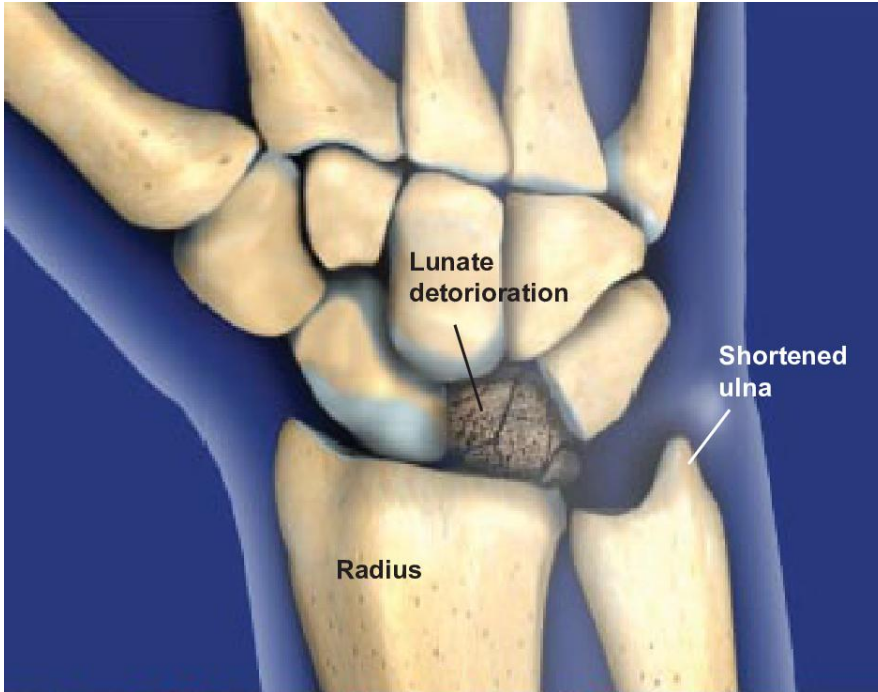




Kienbock's Disease



Overview

Kienbock's disease is the death and deterioration of the lunate, one of the small bones in the wrist. It usually occurs in young adults and causes wrist pain, weakness, and loss of motion.

Causes

The exact cause of Kienbock's disease is unknown. It may result from a compromise in the blood flow that supplies the lunate. Theories suggest that an increase of pressure within the lunate leads to congestion of the blood vessels that supply the bone, causing death of the bone cells. Some believe that it may be caused by trauma, although in many cases the disease cannot be tied to a specific traumatic event. A shortened ulna may also contribute to development of the disease, because a shortened ulna can cause the lunate to receive higher loads of pressure as the wrist is used.

Symptoms

Wrist pain, limited motion, and a weak grip are very common. Swelling and pain over the lunate on the top of the hand may also be present. The intensity of these symptoms may range from mild to severe.

Diagnosis

Kienbock's disease is diagnosed with x-rays of the wrist, which may show increased density of the lunate, cystic changes, fragmentation, bone collapse, or arthritis, depending on the stage of the disease. A bone scan or MRI may also be needed to confirm the diagnosis.

Treatment

The ideal treatment for Kienbock's disease is still debatable. Prolonged casting or bracing to rest the wrist and anti-inflammatory medications are usually the first recommendation for pain relief, but they do not necessarily halt disease progression. Surgery is usually recommended if conservative treatment does not resolve the pain. Surgical options may include shortening of the radius, vascularized bone grafts, or fusion of the carpal bones in the wrist.