

Kienbock's Disease

Kienbock's disease is a condition where the blood supply for one of the small wrist bones is interrupted. Bone is a living tissue requiring a regular supply of blood to keep it nourished. If the supply to the bone is stopped, it can die, which is known as osteonecrosis. The condition affects a bone called the lunate. Damaging the lunate causes a stiff and painful wrist. Over the course of time, it can cause arthritis.

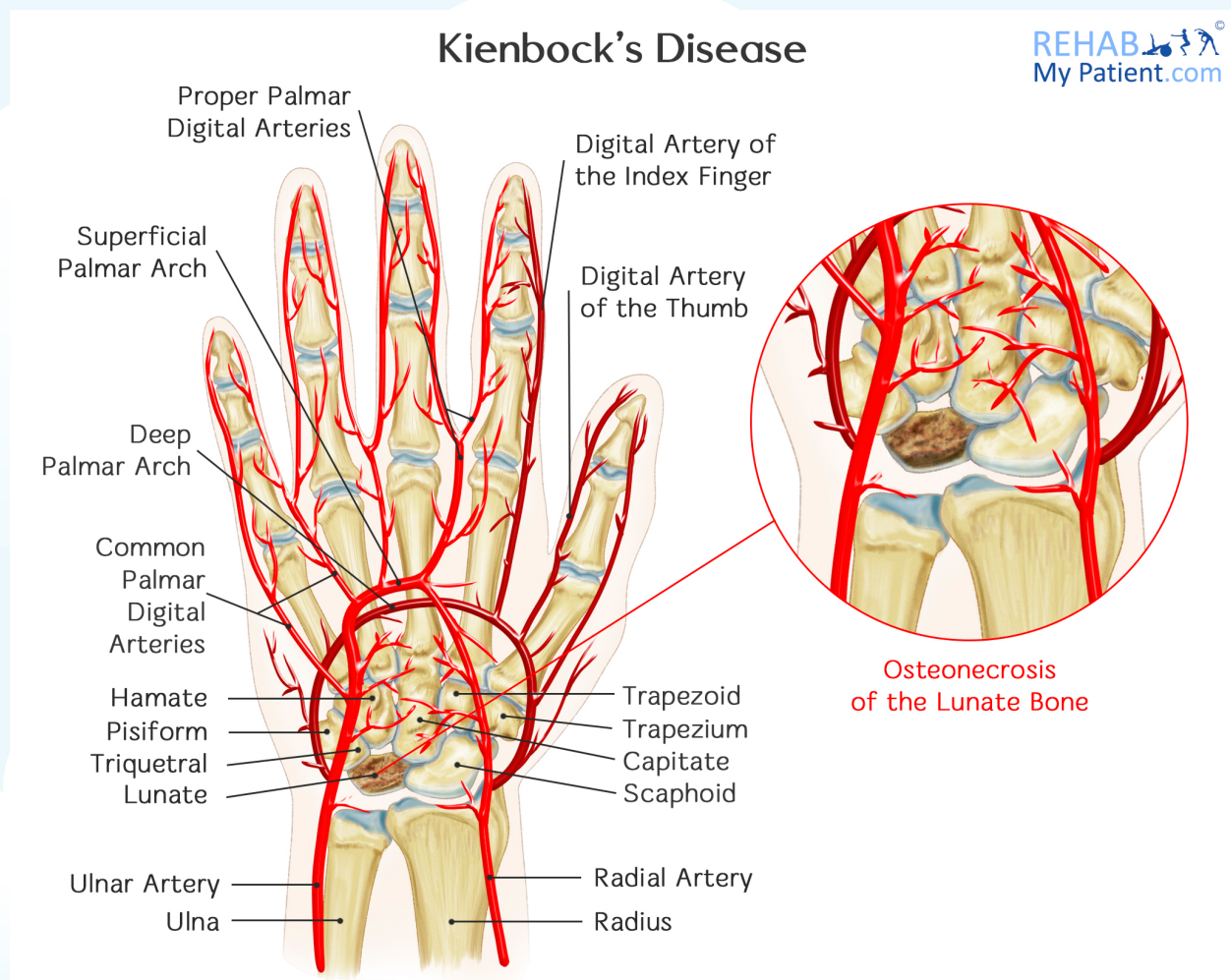
The cause of the condition isn't known. Many of those with the disease believe that they have sprained their wrist in the beginning. They might have experienced a trauma to the wrist, such as falling down. This trauma causes the blood flow to become disrupted.

Kienbock's Disease Anatomy

The anatomy within the hand is quite complex, fascinating and intricate. Its integrity is imperative for individuals to be able to go through life on a regular basis and engage in normal activities. Hands can be affected by any number of disorders, but often from a traumatic injury.

Several tendons in the finger work together for straightening and bending the finger. All of the tendons run alongside the top and side of the finger. Tendons at the top of the fingers will attach to the finger's middle bone. When that tendon becomes injured, the fingers aren't able to straighten out fully.

The lunate bone is called that because of its crescent shape. It sits in the row of wrist bones next to the radius (forearm bone). It is also sits between the scaphoid and triquetral bones.



How to Treat Kienbock's Disease:

1. Non-Surgical Treatment

In the early stages of the disease, swelling and pain can be handled with an anti-inflammatory medication. Immobilizing the wrist for a certain time period can help to relieve the pressure on the lunate, which is why a cast or splint might be needed for two to three weeks. It is imperative that you monitor any changes with your symptoms throughout the early stages of the disease. If the pain isn't alleviated with simple treatments, surgery might be required.

2. Surgical Treatment

Revascularization involves the removal of a part of the bone and the attached blood vessels from a different bone. This part of the bone and its blood supply is known as a vascularized graft, which is then inserted into the bone.

Joint leveling is recommended when the two bones within the lower arm are different lengths. Bones can be made longer or shorter by using a graft or removing a portion of the bone. The procedure reduces the forces compressing the lunate and stops the disease progression.

Proximal row carpectomy occurs when the lunate is broken into multiple pieces or severely collapsed. The two bones around the lunate are removed. It helps to relieve pain and maintain partial movement in the wrist.

Tips:

- The disease varies significantly in terms of severity, as well as progression rate. Everyone responds to treatment differently based upon the damage to the lunate and the wrist bones.
- If the disease continues to progress, you might have to undergo an additional procedure.
- After treatment, your wrist won't return to normal from the disease. Treatment does provide you with the opportunity for long-term relief and functionality.
- Swollen and painful wrists are often a sign of Kienbock's disease.
- When the two bones in the forearm are different lengths, it can place undue pressure on the lunate during wrist movements.