

KIENBOCK'S DISEASE

There are Eight Bones in the Human Wrist; the Lunate Bone is Affected by Kienbock's Disease

Kienbock's Most Commonly Affects Men Between the Ages of 20 and 40 Years Old

While Kienbock's disease is a rare disorder, it is still important to understand. Losing motion and strength in the wrist can lead to a complete lifestyle change while causing difficulties in everyday processes.

Please use this guide as a resource for knowledge and understanding of Kienbock's disease causes, symptoms, stages, diagnosis, and treatment.

01 | Cause

There is no known singular cause of Kienbock's disease; multiple factors are considered when presented with the disease. People who suffer medical conditions that affect blood supply, lupus, sickle cell anemia and cerebral palsy; are more likely to suffer a disease like Kienbock's. Skeletal variations from growth complications or other factors can contribute to Kienbock's. Trauma to the hands, arm, or wrist can be direct causes of Kienbock's as well.

02 | Symptoms

early symptoms of the disease can be linked to other complications or medical conditions due to their mild attributes and relation to a possible cause of Kienbock's. Since the disease leads to death to the lunate bone, due to loss of blood supply; symptoms such as mild pain and swelling are common. Progression of the disease shows symptoms of decreased motion or stiffness in the wrist; to loss of strength and grip.

03 | Stages

Stage 1 – Symptoms are similar to a wrist sprain, pain and swelling may be present but no significant loss of strength. Blood supply has been disrupted however x-rays will typically appear normal.

Stage 2 – Continued swelling and pain are present. The lunate bone hardens due to lack of blood supply in a process called sclerosis. This hardening will show the bone as being brighter or whiter in x-rays, showing that the bone is dying.

Stage 3 – Wrist pain increases significantly; weakness and limited motion are present. The lunate bone begins to break apart and surrounding bones begin to shift.

Stage 4 – Arthritic symptoms occur leaving the hand minimally functional. The surrounding bones in the wrist deteriorate on their surface.

03 | Diagnosis

Early diagnosis of the disease can be difficult, as the early stages may not show the disease itself but rather reflect a cause of the disease, like trauma. X-rays and other diagnosis measures may not show any signs of the disease in its early stages. Other tests are typically necessary to confirm Kienbock's, like an MRI, CT scan, or bone scan can properly confirm lack of blood supply to the bones. Due to the typical slow progression of the disease diagnosis can be complicated and delayed.

04 | Treatment

The early stages of Kienbock's do not typically require or benefit from treatment options. More serious and progressed stages typically require surgery. Some hand therapy treatment is recommended, however it will not change the progression of the disease but may minimize impairment. Treatment for Kienbock's is designed to relieve pain and restore function.

To learn more about rare diseases and to find support please visit: <https://www.rarediseases.info.nih.gov>

Did You Know?
The most common cause of Kienbock's is trauma

References

<https://www.medicalnewstoday.com/articles/264720.php>

<http://www.assh.org/handcare/hand-arm-conditions/kienbocks-disease>