

Chronic Wrist Pain

Arthritis is usually diagnosed by a doctor or with laboratory tests. Imaging tests are used to figure out the amount of breakdown of cartilage in the joint.

The most appropriate initial imaging test for chronic wrist pain is an x-ray (https://www.radiologyinfo.org/en/info/bonerad). Some conditions need additional imaging tests for diagnosis or to plan for treatment. MRI (https://www.radiologyinfo.org/en/info/muscmr) without intravenous contrast is often the first follow-up examination, but other tests may also be appropriate, including MRI with intravenous contrast injection.

When infection is suspected, aspiration of the wrist with laboratory examination is indicated. Pain on the pinky side of the hand may represent an injury to cartilage near the small finger. MR or CT arthrography (https://www.radiologyinfo.org/en/info/arthrog), in which contrast material is injected into the wrist joints, is recommended. However, when the patient feels pain on the thumb side of the hand, the most likely diagnosis is a torn ligament. MR or CT arthrography or

ultrasound (https://www.radiologyinfo.org/en/info/musculous) of the wrist may demonstrate the abnormality.

Other diagnoses with similar symptoms include:

- Kienböck's disease, a condition in which one of the wrist bones, the lunate, loses its blood supply and eventually dies. When Kienböck's disease is suspected, MRI or CT (https://www.radiologyinfo.org/en/info/bodyct) without contrast may be necessary to see the amount of bone that has collapsed.
- Pain associated with a mass, or if the physician suspects the presence of a ganglion cyst, suggests the need for MRI with intravenous contrast or ultrasonography of the wrist.
- A stress fracture or other break to the bone that is clinically suspected but not seen on x-ray may require CT without intravenous contrast material for diagnosis.
- Pain that is suggestive of carpal tunnel syndrome is best evaluated by ultrasonography of the wrist.

— By Frank J. Rybicki Jr. and Bruno Policeni, MBA, MD. This information originally appeared in the *Journal of the American College of Radiology*.

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