

CONDITION SLAC and SNAC Wrist

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What is SLAC and SNAC Wrist?

SLAC stands for Scapho-Lunate Advanced Collapse and SNAC for Scaphoid Non-union Advanced Collapse. They are two common types of osteoarthritis that affect the wrist.

The two conditions are considered together as they both get progressively worse over time in a similar pattern on Xrays. A SLAC wrist occurs several years after a scapho-lunate rupture (see 'Scapholunate injuries'). A SNAC wrist occurs several years after a scaphoid fracture (see 'Scaphoid fractures').

Normal Wrist Xray to show different Bones

Thumb base joint

Scaphoid bone

Radius bone (in forearm)



Lunate bone

Ulna bone (in forearm)

A SLAC wrist

Scaphoid bent forwards

Narrowed space between radius and scaphoid



Big gap between scaphoid and lunate bones

Why do both injuries cause the same pattern of joint wear?

Both of these injuries take away the normal link between the scaphoid and lunate bones in the wrist.

The link between the scaphoid and lunate normally means that the two bones move together in a co-ordinated way. Once the link is broken the scaphoid (or the far

end of the scaphoid if it is broken in the middle) tends to bend forward. As the scaphoid is curved when it bends forward too much it doesn't fit snugly into the curved shape on the end of the radius any more. This causes the start of the arthritis patterns SLAC and SNAC, between the end of the radius and the end of the scaphoid.

What are the symptoms of SLAC and SNAC wrist?

As the joint surface wears out the wrist can become swollen, often on the thumb side of the back of the wrist. Often there is also pain in the wrist and less movement. The process occurs very gradually and sometimes people accommodate these changes well. In others the symptoms are more intrusive and eventually cause the sufferer to seek medical help. Gout and pseudogout can also cause this pattern of arthritis, probably by damaging the scapholunate ligament initially.

How is the diagnosis made?

The story from you, the patient, and a careful examination usually suggest arthritis in the wrist. It is common for no specific injury to the wrist to be recalled. The characteristic pattern of Xray changes confirms the diagnosis and the underlying cause.

What treatments are available for these conditions?

Most patients with this condition do not need surgery but manage with various combinations of painkillers, splints and activity modification.

If gout or pseudogout is suspected medical treatment with drugs can be very useful and this may need to be discussed with your GP or a Rheumatology Consultant.

Steroid injections into the joint can dramatically relieve symptoms, sometimes for prolonged periods. The injection doesn't repair the arthritis but does reduce the inflammation within the joint secondary to the arthritis. Sometimes the joint is more painful for a couple of days after these injections. The beneficial effects of the steroid may take up to a week to become apparent. There is also a small risk of infection with these injections.

For persistent, severe symptoms surgery might need to be considered. This must be carefully considered for each patient to balance the risks of surgery against the potential functional benefits. Available options include partial wrist joint fusion, total wrist joint fusion and wrist joint replacement. Your surgeon can advise you further.