



**QUESTION |** I have noticed that some patients with wrist fractures that I thought would have healed without an operation, have been having them fixed with surgery. For example, a scaphoid fracture in a student about to enter exam period. Does surgery allow these to heal faster?

**ANSWER |** Thank you for a great question. Certainly, there are fractures that are able to heal without surgery where I would offer an operation to the patient for various reasons.

One example would be an un-displaced scaphoid waist fracture which would normally be treated in a scaphoid cast for about 6 to 10 weeks. However, the patient would be stiff after this period of time immobilised and would require prolonged physiotherapy. Alternatively, if this were fixed via a percutaneous technique, the patient would have minimal pain and stiffness, and is likely to start using the hand almost immediately for light activities. In your example of a student, this would allow him or her to continue writing or typing. Self-employed people would also minimise the disruption to their business and income.



Pre-operative x-ray of undisplaced scaphoid waist fracture



After percutaneous fixation with a screw, allowing the patient to keep writing and typing immediately

Other injuries where this would be helpful might be some distal radius fractures and some metacarpal and phalangeal fractures. This would be decided on a case-by-case basis.

It is important to note that fixing a fracture in this way only allows the patient to use the hand lightly. The hardware is not strong enough to allow heavy use, such as manual labour or return to sports. In fact, there is no difference in total time to return to sport or any of the long term outcome measures such as pain levels. It is also important that the patient understands that the complication rate with surgery is higher than without surgery.

When cost of surgery is examined, once lost productivity time is taken into account, surgical management ends up being the same cost as, or cheaper than, treatment with cast immobilisation alone.

In the end, it is important to discuss with the patient their personal preferences and requirements when recommending a course of treatment.

In general, surgery for minimally displaced fractures may be recommended more for patients who are:

- young and active,
- have a high-demand occupation, or
- have a particular preference for early range of motion.

Nonoperative management would be preferable for:

- paediatric patients,
- low-demand patients or
- those who have a particular preference to avoid an operation.

**Dr Kwan Yeoh**