

Boxer's fracture (5th metacarpal neck fracture)

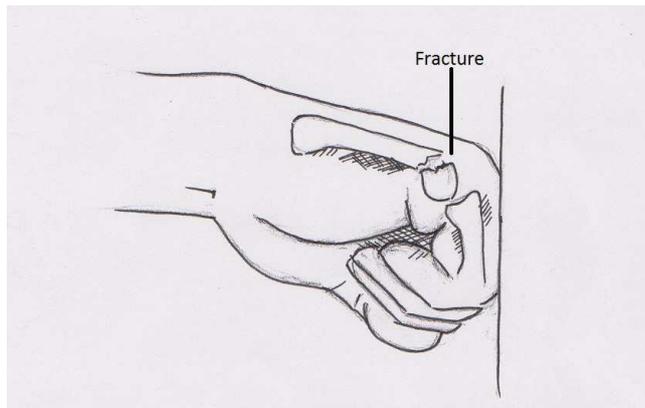
Hand Unit, Plastic Surgery

This leaflet offers more information about boxer's fractures. If you have any further questions or concerns, please speak to the staff member in charge of your care.

What is a boxer's fracture and why have I got it?

Your thumb and fingers are connected to your wrist by bones in the hand called metacarpals. The 5th metacarpal is the bone in the hand which connects your little finger to your wrist. Each metacarpal has four sections: the head, neck, shaft and the base. The head of the metacarpal forms the large knuckle while the neck is the narrow part of the bone just below the head.

A fracture (or break) of the 5th metacarpal neck is commonly called a boxer's fracture, as it is often seen following a punch injury. However, not all boxer's fractures are due to punch injuries, as a fall or other impact to that part of the hand could also cause the bone to break.



What are the signs and symptoms?

The hand may be painful, swollen and bruised. There may also be small abrasions (or grazes) over the knuckles. If the injury was sustained by punching another person in the mouth, there may be puncture wounds from the other person's teeth, known as a **fight bite**. This can be serious and may lead to severe infection, so if you think you may have a fight bite you must tell your surgeon or nurse practitioner.

Do I need any tests to confirm the diagnosis?

The surgeon or nurse practitioner will take a brief history from you and then perform an examination of your hand. An x-ray will be taken if a fracture is suspected. No other tests are normally required.

What treatments are available?

Conservative management

Most people recover well following a boxer's fracture and do not have any significant long-term functional problems. A fracture takes roughly eight weeks to heal. The knuckle often remains dropped and there may be a prominent bony area on the back of the hand. However, this does not cause the hand to function abnormally.

For a short period of time after your injury, your surgeon or nurse practitioner may recommend that the little finger is buddy-strapped to the adjacent finger for support. This allows the fingers to bend and straighten which helps the hand recover more quickly and prevents stiffness.

If the fracture is significantly displaced (or angulated), your surgeon or nurse practitioner may recommend that the bones are re-aligned (or manipulated). This is done in the clinic with local anesthetic injections to numb the area first. Further x-rays are usually taken to check that the manipulation has been successful.

Surgical management

In cases where there is severe angulation or any functional deformity of the finger is found, such as rotation (where the finger is twisted) or scissoring (where the finger crosses over/under the adjacent finger), then an operation may be required to manipulate the fracture. This is usually performed as a day case procedure under a general anaesthetic (where you are put to sleep) or a regional anaesthetic (where your arm is put to sleep). Sometimes after the fracture is manipulated, metal is put across the bone to hold it in the correct position. The most common form of metal used is K-wires. K-wires are temporary and are removed three to four weeks after your surgery. A further information leaflet on K-wires is available.

If you have a fight bite, you will most likely require an operation to clean the wound and reduce the risk of developing an infection. You may also need a short stay in hospital for intravenous antibiotics. Your surgeon or nurse practitioner will discuss this with you further.

After surgery, you will need a splint or cast (something hard that stops you from moving your hand). You will be referred to the hand therapy team for continuing care.

What happens if I do not get treatment?

If you have a fight bite and do not receive treatment, you may develop an infection in the soft tissues and/or in the bone. A bone infection is very serious and can lead to amputation.

Is there anything I can do to help myself?

While your fracture is healing, avoid heavy lifting and sports for eight weeks. Smoking has been proven to increase the risk of infection and to slow down bone healing, therefore you should try to stop smoking.

Driving

Driving is an issue between you, your insurance company and the DVLA. You must be able to demonstrate that you can make a full fist and perform an emergency stop.

Contact us

If you have any questions or concerns about your hand, please contact the Hand Unit on 020 8725 4770 (Monday to Friday, 8:30 am to 5 pm).

Out of hours, please contact the on call hand team via the switchboard on 020 8672 1255 and ask for bleep 7050.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough Wing (near the lift foyer).

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Web: www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Tel: 111



Reference: PLS_BF_01 **Published:** March 2018 **Review date:** March 2020