The joint(s) in your finger(s) have been fused. This means that a finger joint has been removed and the bone-ends have been joined together (fusion). There are many ways of joining the bones but they are usually held in the best position by a number of metal wires.

**Internal fixation** The bones are held by wires or screws buried under the skin that are usually left inside permanently.

**External fixation** Often at least one wire is left sticking out of the skin. This is removed by the doctor about 4 weeks after the operation when the bones have begun to join. Patients are always anxious about this but removal of a wire is simple and virtually painless.

After the operation, hand elevation is important to prevent swelling and stiffness of the fingers. Please remember not to walk with your hand dangling, or to sit with your hand held in your lap. It is fine, however, to lower your hand for light use.

Your stitches will be dissolving by about two weeks after your operation. There will be some swelling and bruising but look out for any redness or tenderness in the area around the wound that might indicate an infection. Do not apply antiseptic but contact my secretary if you have any worries.

Once the dressings are removed, it is safe to get the hand wet in a bath or shower. The wound and the surrounding skin can become dry and if this occurs, briefly immerse the whole hand in water to which a small quantity of baby-oil has been added. Moisturisers (e.g. E45, Diprobase creams) can be used on the hand but avoid rubbing them directly into the wound at this stage. The area will be swollen and tender for many weeks after the operation. This can be helped by massaging the area firmly.

The bones heal together over a period of weeks; the join gradually becoming stronger similar to glue setting. The initial dressing includes a splint (e.g. plaster). After the dressing has been removed, you will be provided with a further splint by a Hand Therapist. The fusion must be kept protected from knocks and stresses until x-rays show that the bone-ends are joining together. This usually takes about 6 weeks. The fusion will not be really "solid" and ready for heavy use until at least 12 weeks at the earliest and some splinting will still be needed until this time.

During the healing process, it is important to move the rest of your hand joints through their full range (including the others on the same finger) to prevent stiffness. Remove your splint regularly to allow finger movement. Movement ("active motion") alone will do no harm to the fixation but until it has healed the operated finger(s) must not be forcibly bent ("passive motion") or strained by heavy picking up, pushing, pulling, gripping etc.

Timing of your return to work is variable according to your progress and occupation, and you should discuss this.

**Wound** Possible problems include swelling, bruising, bleeding from the wound, blood collection under the wound (haematoma) and splitting of the wound (dehiscence).

**Infection** This is indicated by the appearance of redness around the wound or the exposed wires. This must be reported quickly and will be treated with antibiotics. If it does not settle, it may be necessary to remove the fixation.

**Stiffness** The operation inevitably causes loss of movement in the joint fused. However, neighbouring joints can also get stiff because of tendons sticking around the fusion site as it heals. This is prevented by keeping the tendons gliding with regular exercises.

**Regional pain syndrome** About 5% (1 in 20) of people are sensitive to hand surgery and their hand may become swollen, painful and stiff after the operation. This problem cannot be predicted, is variable in severity and is principally treated with physiotherapy.

**Non-union** The bones can fail to join for many reasons such as too much movement or infection. It may be necessary to redo the operation if this occurs.

**Mal-union** The bones can fail to join at the best angle if the fusion is damaged or becomes infected. It may be necessary to redo the operation if this occurs.

**Metalwork** Internal wires or screws can remain uncomfortable, prominent or even become exposed through the skin. Contact us if worried. The offending metalwork is then removed, usually as a minor procedure under local anaesthetic.