## SESAMOID FUSION

Thumb joints, like any other, are stabilised by ligaments. The *volar plate* lies on the front of the joint. This tightens as the joint extends (straightens). The volar plate of your *metacarpophalangeal joint* (MCPJ) is not working properly. This may been caused by its failure to develop properly and/or if it has been snapped in an accident. This allows the thumb to hyperextend (over straighten). The joint can slip out of its proper position and even dislocate because of the instability.

The thumb has two little sesamoid bones in front of the joint close to the volar plate. These glide over the metacarpal head

in a very similar way as the patella (knee-cap) glides over the femur. The hyper-extension of the thumb MCPJ can be prevented by fusing (joining) one of the sesamoid bones to the metacarpal head

The operation involves a cut on the side of the thumb. The gliding surfaces are removed from the sesamoid and the adjacent portion of the metacarpal head to permit bone-to-bone contact. The bones are then joined by a "bone suture" technique that is illustrated in the diagram. This may be achieved by passing a wire through bone via a small additional incision on the other side of the thumb.

Your hand will be placed in a bulky dressing that includes a plaster to protect the operation. Movement of the hand and thumb-tip should be continued and you should perform normal light activities after the operation.

Two weeks after the operation, your stitches will be dissolving and your plaster will be changed to a lighter splint. At this stage, you can carefully remove your splint once or twice each day and perform some gentle exercises aimed at maintaining flexibility in the thumb joints.

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There obviously will be some swelling and bruising. Look out for any redness or tenderness in the area around the wound that might indicate an infection. Do not apply antiseptic but please contact my secretary if you have any worries. Once 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.

Six weeks after the operation, you can begin to take off your splint during the day for light use. Physiotherapy will now be started and aimed at recovering thumb movements. The repair remains vulnerable until 12 weeks after surgery. It is worth wearing the splint for protection and at night until this time. Possible complications include: -

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

**Scar** You will have a scar on the thumb, which will be firm to touch and tender for some months. This can be helped by firm massage with the moisturizing cream.

**Neuroma** A small nerve running in the region can occasionally be damaged during the surgery and either cause numbness on the back of the thumb or form a painful spot in the scar (neuroma).

**Function** Recovery from this operation can be slow and it can often be 6 months before you can resume heavy activities. You will probably be able to drive a car after 12 weeks as long as you are comfortable. Timing of your return to work is variable according to your occupation and you should discuss this.

**Stiffness** You will not recover full movement at the affected thumb joint.

**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.



