# Having a Hand Operation



The Lothian Hand Unit Information for Patients

You have been put on the waiting list to have an operation on your hand. The majority of routine operations are successful. It is important to be aware of some of the problems that can happen following surgery. This information sheet outlines some of the complications of surgery and how to minimise their effects.

# Preparing for a hand operation

## • Rings and Jewellery

Please remove all rings and jewellery from the arm that is having the operation. Hospital policy means that we are unable to operate if you are wearing a ring on the side of the operation. If you are unable to remove your ring, we recommend that you ask a jeweller to cut the ring off.

## Nail polish

Please remove all nail polish from your hands before coming into hospital for your hand operation.

# Recovering from a hand operation and the risks of hand surgery

#### Elevation

Keeping your hand elevated above the level of the heart (especially for the first 24 – 48 hours) reduces swelling and pain. Sleeping with your hand propped up on pillows can also help.

#### • Wounds

All wounds should be kept clean, dry and covered for at least 10 days after surgery. This allows normal wound healing to start and reduces the risk of infection. Once the stitches are removed the wound can be cleaned and left open to the air. Do not soak the wound for 2 weeks after surgery (e.g. in the shower or bath).

During the healing process the wound is tender and often itchy. This is normal. The wound should heal over after 2 weeks but it can take around 6 -12 months for the wound to settle- usually into a thin, white, non-tender scar.

When you have an operation, the nerves on your skin are divided by the wound. This can make your skin surface feel numb around the wound, which can become permanent. It is very unusual for this to give any major problems, but you should be careful when handling hot or cold objects.

# • Haematoma / persistent bleeding

This is an occasional complication of surgery. It is more likely to happen if you are taking blood thinning drugs (such as aspirin or warfarin), or if you have had difficulty stopping a bleeding cut in the past.

You may need a change of dressing and, in rare occasions, a second operation to stop the bleeding. You will usually be kept in hospital overnight if the wound bleeding does not settle quickly.

## • Wound dehiscence (when a wound does not close properly)

The wound is normally closed with stitches. If one of these fails, the wound can gap and remain open. The wound is allowed to heal and this can lead to some widening of the scar but it is not serious.

#### • Scars

Wound tenderness is normal following surgery. Wounds heal with scars. Scars can also be tender. In most cases this will settle within 2-3 months of the operation. Long term tenderness is rarely an issue.

Hypertrophic scar formation can occur. This is a condition in which the scar increases in width and feels lumpy. It can give rise to a cosmetic issue and cause some stiffness but it is rarely an issue. Lumpy scars tend to soften and reabsorb with time (6-12 months).

#### • Hand stiffness

It is important to move your hand and fingers, which are outside the dressing, early and often following hand surgery to avoid stiffness.

Wounds all heal with scar tissue over the course of a few weeks. This scar tissue can stick to normal tissue such as tendons and nerves, which can affect normal movement. Moving the hand soon after surgery should ensure that the structures under the wound glide against each other and the wound more easily.

If your fingers are outside the dressing, exercise your hand by bringing your fingers down into a full fist and then straighten your fingers out fully around 10 times every half hour. Hand therapy is sometimes necessary after hand surgery. Your movement will be assessed by the nurse or doctor at the post surgery visit. You should raise any issues with them.

#### • Infection

Wound infection affects around 1 in 100 patients following an operation. In some cases there may be some redness around the stitches. This will settle after the removal of sutures (the stitches) and does not require treatment. More severe cases may require antibiotic treatment and occasionally a further operation to clean out the wound- although this is very unusual.

#### • Complex regional pain syndrome (CRPS)

CRPS is a rare but very serious complication following surgery to the hand or arm, affecting 1 in every 2000 patients. It causes pain and increased sensitivity, swelling and stiffness in the hand. It can be treated with physiotherapy and medical therapy. It can take up to 2 years to improve. Sometimes patients have a long term disability as a result and the effects of this condition can be worse than the original problem.

#### • Compartment syndrome

This is a rare condition following hand surgery. It is a consequence of swelling within muscle compartments of the hand and arm that can lead to irreversible damage to nerves and muscles if not diagnosed and treated.

Typical symptoms include disproportionate pain that does not respond to painkillers and feeling 'pins and needles' in the hand and fingers.

The treatment is further surgery under a general anaesthetic (where you will be asleep for the procedure), which involves releasing the pressure within the muscle compartments. These wounds are then closed several days later when the swelling has subsided. Permanent loss of function of the hand and arm can be a consequence of compartment syndrome.

#### • Nerve and blood vessels injury

There is a risk of nerve or blood vessel injury when operating on the arm and hand. There are very small nerves in the skin that can be damaged- resulting in some altered sensation (this could be loss of feeling, numbress or a new feeling) at the site of the surgery. This altered sensation tends to improve over time.

Damage to large nerves is rare but, if this does happen, it is usually due to the nerve being stretched or bruised. This can result in altered sensation and occasionally weakness that is usually temporary.

Permanent damage to a nerve or complete division of a nerve during surgery is extremely rare but can result in long term loss of function of the arm and hand.

Blood vessels can be damaged during surgery. Most bleeding is stopped during the operation or will resolve shortly after the operation. However, very rarely a blood vessel could be damaged that requires further surgery or, in extremely rare circumstances, may risk the blood supply to a finger or thumb.

#### • Deep Vein Thrombosis and Pulmonary Embolism

Deep vein thrombosis (DVT) occurs when blood in the veins of the leg clots, usually due to lack of movement. These clots are a problem because they can detach and travel in the blood stream to the lungs and heart (pulmonary embolism). For this reason, all patients having a general anaesthetic have mechanical compression devices attached to their lower legs in order to prevent blood forming clots.

Although DVT is relatively common after lower limb surgery, it is extremely rare after hand surgery, and is seen in around 1 in 10 000 cases. If you know of any family members who have suffered from this condition, please let the nurse or doctor know.

All complications are significant events, but most can be treated successfully and are likely to improve over time with little or no long-term harm to normal function. However around 1 in 2000 patients can experience a major complication that can be life threatening or result in long term or permanent loss of function of the hand or arm.

# Return to activities after an operation

# • Working

Time off work may be required following surgery depending on the type of job you have. There are no hard rules about this. Patients who have heavy-duty, manual jobs may need 4-6 weeks off work whereas patients with office based jobs often return to work within a few days. You should discuss this with your doctor on the day of surgery and request a sick line if necessary.

# • Driving

You should not drive after hand surgery until you are fit to do so. It takes time to recover from the effects of the anaesthetic. Some of the pain medication you will be prescribed will affect your fitness to drive. If your hand or wrist are painful or stiff you may not be able to drive safely.

It is your responsibility to ensure that you are fit to drive in terms of the DVLA guidance, taking into consideration your hand surgery and any other medical condition that you may suffer from. There is detailed information on the Government website (link below) about fitness to drive and you should refer to that before driving.

#### https://www.gov.uk/health-conditions-and-driving

If you are in any doubt, consult your surgeon or GP and also your insurance company. Different motor insurers have different policies about medical fitness to drive and you should check you are covered by your insurance before driving.