

### RUH Advice for patients due to have spinal surgery



Please note that this is a "Generic" or general information leaflet for spinal surgery and not all the information will "specifically" be for your operation.



You are on the waiting list to have spinal surgery. The details of your admission will be sent or telephoned through to you by the Orthopaedic Bed Managers close to the time of your surgery.

#### PACKING FOR THE HOSPITAL

- Bring your pyjamas, nightdress, slippers, toothbrush, comb, towel, etc., as well as a small selection of day clothes and underwear. Please do not bring any valuables with you.
- 2. Choose light loose pyjamas or nightdress that can go over your flannel corset which you will need to wear after the operation. You can bring a well fitting cotton T-shirt or vest that can go underneath the corset, as this will make it more comfortable. A track suit or loose top and leggings are usually easy to put on and comfortable to wear. Bring slip on shoes.

### PRE-ADMISSION CLINIC

You will be asked to attend the pre-admission clinic a few weeks before your operation. At this time any blood tests, x-rays and heart traces etc that are necessary will be done. You will be measured for a corset by a Physiotherapist on the ward.

The duty doctor will take your medical history, including medical complaints and record any allergies that you may have. After describing to you about your operation and what the aim, implications and the possible complications are, the doctor will take your consent for the operation.

The Consultant or Registrar will be available some time during your visit to the pre-admission clinic to answer any questions you may have. The Nursing Staff in the clinic will guide you through the clinic and explain to you how the other members of the Health Care Team are involved in your case whilst in hospital, i.e. the Anaesthetist, Physiotherapist, Occupational Therapist and Pain Control Team. You will also be given advice regarding your discharge plans. Please hand in the list of heights form to your Occupational Therapist or nurse in preadmission.

Regarding any medication which you may already be on we would advise you to continue to take all of your normal daily medication. Aspirin should be stopped one week before and the combined oral contraceptive pill should be stopped 6 weeks before the operation because this does increase the risks of clots in the legs going to the lungs.

#### DAY OF OPERATION

From midnight the day of the operation you will not be allowed to have anything to eat or drink as a routine precaution for the anaesthetic. You will have been given medication to help you to relax for the time that you are waiting before your operation. The anaesthetist will begin preparation for your surgery and will put you to sleep after your arrival in the theatre complex.

After the operation you will be transferred back to the Orthopaedic Recovery Ward for close and careful monitoring.

For the first 6 hours after the operation you should preferably only lie on your back as this allows the wound to be compressed and reduces the amount of bleeding. Later you can start turning approximately every 2 hours and lie on your side as is appropriate and as feels comfortable.

You will have an intravenous drip in your arm which will be used to give you fluids, painkillers and also other medication. This is important because on the day of the operation you will not be able to take anything by mouth while we are waiting for your stomach / intestines to start working again. You can however, have some ice to suck, tea or fluid sips during that period to keep your mouth moist.

During you post-operative period you will be given painkillers either into your drip or to be taken orally and all you need to do is to ask the nurses caring for you for the medication if necessary.

On the first day after your operation you will be transferred back to the general ward. The drip will be removed from your arm and you will be able to start taking a light diet. You will be shown exercises by the Physiotherapist to help you get moving and you will also be shown how to turn in bed on your own.

Over the next few days while you are settling down after the operation you will do very little other than just lying in bed. At approximately 1-2 days after the operation you will be measured for a flannel corset and once this is fitted you will then start being mobilised with help from the Physiotherapist. At this stage the Occupational Therapists will also visit you and discuss your further mobilisation, requirements for when you return home, give you advice regarding appliances or aids to help you with your daily activites and arrange any equipment needed.

A catheter is most often inserted just before the start of the operation to avoid discomfort while passing urine for the first day or so. This will be removed as soon as you are up and about and ready to walk to the toilet. Laxatives are also given to try and reduce constipation caused by the immobility and strong pain killers.

Your wound will be inspected at approximately 3-4 days after the surgery. There should be no sutures or stitches that need to be removed because a hidden dissolvable stitch will have been put in. Only short little adhesive tapes (which are not painful to remove) will be across the wound. You should be able to have a shower about 3-4 days after your operation.

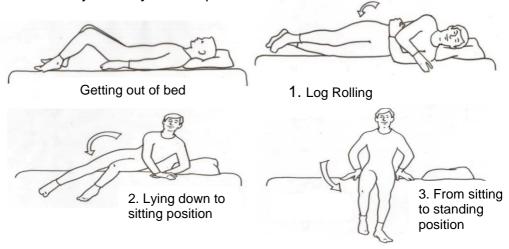
#### **DISCHARGE**

Depending on what operation you have had, you will be discharged approximately 1 - 10 days after the surgery. Please make sure you follow the instructions outlined below.

You will be followed up in outpatients by your doctor or one of the team at 6 weeks. Prior to your discharge you will be given the date of your follow up visit as well as an adequate number of painkillers to help control any further pain you may be experiencing. It is normal to have a certain amount of pain after a major spinal operation, but as time goes by this will gradually become less and less.

# MOBILISING INSTRUCTIONS AFTER SPINAL FUSION OPERATION

1. Getting up – 'log roll' (turn on your side – hips and shoulders move together) to get out of bed as instructed by the Physiotherapist.



Mobilisation may begin anything from 1-3 days depending on what procedure you have had and what the problem is with your spine. You should enquire from the doctor approximately how long before you will be allowed up and allowed home.

- 2. Remember that no two backs are the same and you must not compare yourself to anyone else regarding your own back problem and your own mobilisation.
- 3. Having your bed at home raised on blocks approximately 20cm (8"), to ensure hips are higher than knees when getting in and out of bed, makes things

- 4. much easier. The Occupational Therapists (OT) can help you organise this if required.
- 5. Pull one knee up at a time in a lying position to avoid straining the spine.
- 6. To sit up on the edge of the bed first get as close to the edge of the bed as possible in a side lying position, then use your upper arm to help push yourself from a lying to a sitting position and at the same time lower your legs over the edge of the bed - as illustrated above.
- 7. To stand up from a perching position, pull feet close the bed or chair and with your hands supporting you on the bed behind your hips or on the arms of the chair, slide your pelvis forward, extend your knees and stand.

Do not bend forwards, but keep your spine erect.

8. Perch / sit down – stand with your feet close to the bed or chair. Reach behind you for support with both hands (to avoid rotation). At the same time bend the knees, and sit down, ensuring that the hips never bend more than 45°.



Perching (knees below hips)



Always try to sit with hips somewhat higher than knees as if on a bar stool or in a 'perched' position. Do not use a normal toilet without some form of raised seat for 2 – 3 months after operation. You should be issued with a toilet raise before you leave hospital by Occupational Therapy. Suggestion: To make it easier to get up from a chair, raise the back legs of the chair with a tile, plank, etc. to incline seat of chair slightly forwards.

- 9. Avoid twisting of spine.
- 10. Keep spine erect at all times. When picking up an item (e.g. off a chair), approach chair sideways, bed knees to not more than 45° and lift object. Avoid bending over sideways. Do not bend forward to pick up objects off floor. Should you not have anyone in attendance obtain a 'helping hand' device, face the object and pick it up from a knee-bent position keeping your spine erect.
- 11. Dressing: Do not attempt to put on trousers, pants, tights, stockings, shoes or socks of tie your laces without help either from someone or using an aid, e.g. 'helping hand' device, available from Occupational Therapy. Instructions on the use of the device and information on dressing will also be given.
- 12. Sit for short periods at a time at first, gradually lengthening the time, for about 20-30 minutes at a time.
- 13. Preferably do not bath but use a shower for 6 weeks or so. To wash yourself or your hair, get up with your corset on, walk to the shower, and remove the corset. Keep upright throughout the procedure. Let someone help you to wash and dry. Replace the corset before leaving the bathroom.

- 14. Avoid stairs if possible. If unavoidable, negotiate stairs as little as possible and only according to instructions.
- 15. Do not sit propped up in bed.
- 16. To get into a car have the back rest of the passenger seat in a slightly reclined position. Sit down as described in 7 above, not flexing hips more and 45°. Slide backwards towards the drivers' seat until your lower legs can be moved into the foot well or recess in the front of the passenger seat. Then slide into the seat keeping the backrest reclined somewhat. Preferably keep the journey distances to a minimum for the first few weeks or so.
- 17. Sexual intercourse should initially preferably be avoided. You should always be the passive partner whether male or female.
- 18. Do not run, jump, go boating, vacuuming the house, making the beds or do gardening etc. for about 3-4 months minimum.
- 19. You may get up without the corset for a few minutes to for example go to the toilet or make a cup of tea etc; however if you are getting up for the day then keep it on all the time. The corset may be loosened or removed while lying down. You do not have to sleep with the corset on.

All these precautions should be followed for about 4-6 weeks. After this period gradually revert back to normal function and your usual activities of daily living. After 6 weeks or so it is good for you to swim, walk longer and longer distances and go to the gym and on a cross trainer etc; The physiotherapists

will also give you some advice regarding the level of activity you should do.

#### RETURN TO WORK AND DRIVING

It is impossible to give you an exact time as to when you may resume work. It is unrealistic to expect to get back to physically heavier types of work in under 4-6 months. Some people doing physically strenuous types of work may never return to bending, stooping, and lifting work. Generally speaking, for people whom have had a microdiscectomy, you can think about returning to work anything from 2-6 weeks after the operation, depending on how you are feeling, the nature of the work you do and the amount of driving that you need to do as part of your job.

If you have had a spinal fusion operation or spinal stenosis decompression we would expect you to be off for 8-12 weeks. When you go back to work preferably try and arrange things such that you do mornings only or part time work for the first 3 – 4 weeks.

With regard to driving after an operation there is no consensus view and no specific guidelines as to when you can drive following spinal surgery. You may like to contact the DVLA and your insurance company but they will probably advise that the surgeon must make the decision. We do not specifically give advice - but would recommend that you need to be able to safely control the car including being able make an emergency stop! It should be safe to drive about a month or so after the operation but only you can make this decision. You must not drive if you are still on strong painkiller type medication after the operation nor if your legs are not back to their normal strength and control.

# POSSIBLE COMPLICATIONS RELATED TO SPINAL OPERATIONS

Any operation has the potential for complications or adverse effects whether it is a minor or major procedure. More major procedures do have higher chances of these complications or untoward side effects and this is even more so if you already have other pre-existing medical conditions such as heart disease, diabetes etc;. The risks of the operation are also higher in people whom are having a repeat or second time spinal operation. All spinal operations are regarded as major surgery.

Every possible precaution is taken to prevent any complications occurring. One cannot outline each and every complication that could occur, but the more common complications will be discussed with you by the surgeon when consent is taken for the operation.

- There are potential complications relating to having any operation or general anaesthetic - even for the smallest procedures. Spinal surgery, as a general rule, is complex surgery and cannot be done under local anaesthetic.
- 2. Wound infection occurs very infrequently (less than 1% of patients). All precautions are taken to prevent a wound infection. You are given antibiotics, meticulous sterile techniques are used, you will be warmed during the operation and a special "ultra clean" air laminar flow surgical operating theatre is used to try and minimize infection.

When having a repeat operation or revision surgery the chances of infection are higher, particularly if you did happen

to have had an infection in the first operation. Generally speaking diabetic and overweight patients have a higher chance of infection. The overall chances of you getting an infection are, however, extremely small.

3. Deep Vein Thrombosis or DVT (developing clots in the legs) and Pulmonary Embolism or PE (these clots moving from your legs to your lungs) are a potential a life threatening complication.

With any surgical procedure there is a risk that one develops one or both of the above two problems but the chances, particularly in spinal surgery, are small and far less than for hip or knee surgery. The risks of a pulmonary embolus (clot going to your lungs which can be fatal) in spinal surgery is about 1 in 1000. Many spinal surgeons prefer not to give DVT preventative medication (Warfarin or Heparin like medication – "blood thinners") because they can cause bleeding around the spinal cord leading to weakness or even paralysis in the legs as well as permanent bowel and bladder incontinence. We do however always use special inflatable calf and foot pumps to try and minimise this risk both during and after the operation until you are fully mobile.

You will also be shown exercises and will be mobilised early to try and minimize the chances of blood clots forming in your legs. Special stockings (TEDS) will also be given to you to help to try and prevent them forming. These should be worn for 6 weeks after the operation.

4. With any major surgery there is always a chance that you may need a blood transfusion. Generally speaking

- 5. We try to avoid giving blood transfusions but sometimes this is unavoidable. With today's available modern tests, the chances that you acquire one of the transmissible diseases through a blood transfusion are exceptionally small. It is however unusual for you to need a blood transfusion after a spinal operation. Sometimes for the bigger operations we use a reinfusion system so we can give the blood that you have lost during the operation, back to you after it has been micro-filtered.
- 6. If you have a spinal fusion operation, instrumentation is sometimes used (screws and rods placed into your vertebrae or bones of the spine). The aim of the instrumentation is to hold the spine clamped firmly together in position while waiting for the bone graft to knit (fuse) together.

There are recognized possible (but rare) complications related to using the screws and rods. These include cracking or breaking of the metal screws etc; due to metal fatigue. Sometimes the screws can be misplaced leading to possible nerve injury. The chances of this happening are very small. one lf of these aforementioned occurs, this does not necessarily mean that the instrumentation has to be removed or that the operation is a failure as essentially one is relying on the bone graft growing together to give your back support. The screws are only used to hold or clamp the bones in position while the bone grafts knits together which takes about 6-12 months. Normally the screws or implants are left in your spine and not removed.

If you are having a spinal fusion operation we most often will use bone from the right side of your pelvis as part of the "bone graft". You will most likely experience

some numbness in this area of about the size and position of your trousers' back pocket. This should improve somewhat but will probably never return to being completely normal. For the longer operations lying face down for such a long time can cause pain as well as numbness in the so called pressure areas. We do take great care to position you but cannot avoid the pressure completely. Please note that for spinal fusion operations the aim of the procedure is to "Stiffen your Back" so please don't be disappointed if your back feels very stiff afterwards!

7. Any spinal operation involves working on or around your spinal cord and nerves supplying the bowel, bladder and legs for most of the operation. There is always a chance that these nerves are damaged or harmed during the operation leaving you with weakness of your legs and possible incontinence of your bowel and bladder control. Once again the chances of this happening are extremely small but not zero. The membranes or coverings of the nerves and spinal cord (called the dura) are tissue paper thin and can be torn during some operations because they are very stuck down or adherent. If a tear occurs then I will try and repair this with a microscope. Sometimes however this is not technically or safely possible in which case we will keep you lying flat in bed for a few extra days while waiting for the tear to spontaneously seal over on its only occurs in about microdiscectomy operations, in 5% of spinal stenosis operations and in the region of about 10 - 15% for second time revision or repeat operations.

It is important that you are aware of these potential downsides or possible complications and side effects when having a back operation. The chances of them occurring are however 'very small but definitely not zero'. As mentioned, we will do absolutely everything we can to try and prevent and reduce the chances of problems related to your operation happening however any operation, even the smallest procedure, has the potential for experiencing some unpredictable complication. Only you can decide whether your symptoms are severe enough to go ahead and have an operation done with the potential associated risks. The main problem with back surgery is that the result is not always predictably excellent or gratifying and can, on occasions, even make your symptoms worse.

We will gladly answer any queries you may have. If you do have problems related to your operation, in the first few weeks after the operation, please contact us directly.

Yours sincerely
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