YOUR TOTAL HIP REPLACEMENT

"THE PATIENT'S GUIDE"

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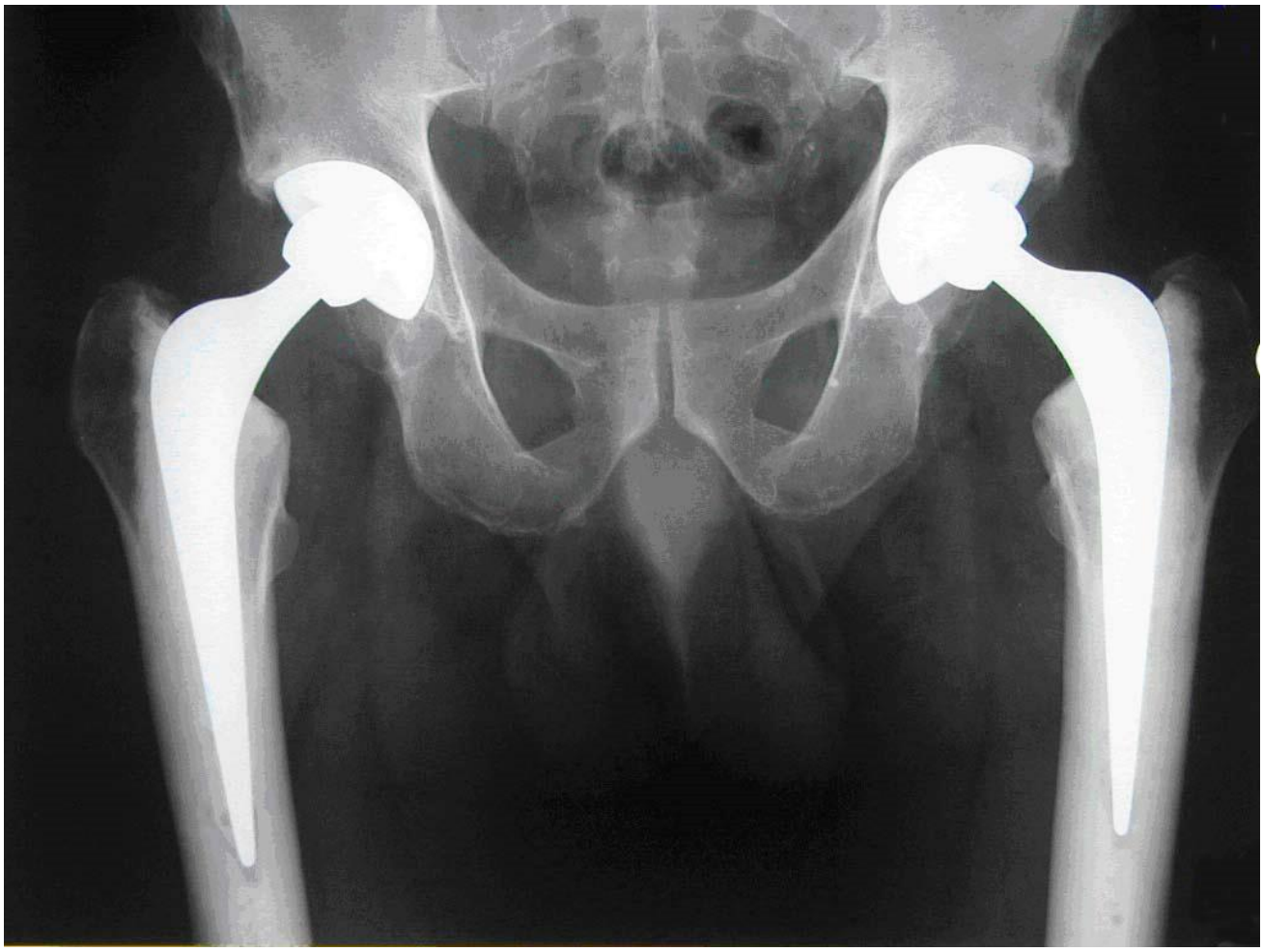

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1. INTRODUCTION

The Patient's Guide has been written to give you an understanding of total hip replacement surgery. Basic information is included about the cause of a hip problem and the nature of surgery when a hip replacement is required. However, the guide is really intended to give you some idea of what to expect around the time of surgery, your recovery, the long-term outcome and possible problems that can be encountered. Please keep in mind that every individual differs, so your progress and circumstances may vary from those described below.

For some, this guide is too long, for others it lacks detail, but I have tried to cover concisely what I think is important and the issues patients have generally raised with me over the past 20 years. ***Please bring this guide with you when you come into hospital.***

2. THE AIM OF TOTAL HIP REPLACEMENT SURGERY

The aim of surgery is to improve your quality of life, primarily by relieving your pain. If your hip is stiff, the range of movement may also improve, but this is not always the case. Replacement hip surgery is considered by some to be one of the greatest surgical revolutions in the past few decades. However, no major surgery should be entered into lightly, so in general terms before you proceed with surgery, your pain should be intrusive and often troubling you at night, your walking distance restricted, and pain-killers will have often failed to control your pain. You will probably be struggling to manage your everyday activities, work and recreation. You may already be using a walking stick. You will probably have tried a course of physiotherapy.

3. WHAT IS A TOTAL HIP REPLACEMENT OPERATION?

The operation replaces a worn out hip joint, which has usually been damaged by arthritis, or occasionally by another cause. The hip joint is a ball and socket joint, formed by a socket in the pelvis (the acetabulum) and a ball on the head of the thighbone (femur). Over many years the smooth covering (cartilage) of the joint may be worn away, exposing the underlying bone and forming an "arthritic" joint. As a result, the joint becomes painful, movement is restricted and function impaired.

4. WHAT TYPES OF TOTAL HIP REPLACEMENT ARE THERE?

There are many different types of total hip replacement in common use and the principles are all similar. There are two components, one to replace the worn socket described as an “acetabular cup/socket” and the second to replace the worn ball of the femur described as a “femoral stem”. Traditionally, hip replacements were held in place with a special bone “cement”; the acetabular cup is made of high-density polyethylene (a form of plastic) and the stem is made of metal (usually stainless steel or cobalt chrome).

There are variations from this and sometimes an acetabular cup with a metal backing is used, without cement – an “uncemented” component. This metal acetabular cup has a porous surface, for bone on-growth to hold it in place, and the cup is then lined with polythene or ceramic. Often one or more screws are passed though the cup into the bone of the pelvis, for initial support of the component, whilst the bone grows onto the socket. Sometimes an uncemented femoral stem can be used and again the bone grows onto this to hold it in place.

Generally a metal ball will articulate on a polythene surface, to form the new hip joint itself (the articulation). Sometimes a ceramic ball is used with the polythene socket, or a ceramic lined metal socket can be used with a ceramic ball. (When there is a ceramic ball and ceramic socket, occasionally these type of implants can squeak.) Metal-on-metal total hip replacements, with a large metal head and large metal lined socket are no longer used.

5. PREPARATION FOR SURGERY – The Pre-admission Assessment Clinic

You will usually be seen a few weeks before surgery by a Nurse and Physiotherapist, in a Pre-admission Assessment Clinic at the hospital. This appointment will give you an opportunity to discuss any queries with the Nurse and Physiotherapist. The Nurse will take certain details and undertake various blood tests, a urine test, an electrical recording of your heart, swabs to look for MRSA, perhaps a chest or further hip x-ray, etc. Plans for your care at home after discharge from surgery will also be discussed with the Nurse. ***Please bring details of your medication to this appointment.***

You will be asked about your home situation, measured for crutches and advised about various aids which may be helpful and where to obtain them. These aids may include a

toilet seat raise, bath board, ‘helping hand’, long shoe horn, etc. You may be instructed on the use of crutches.

Some patients will also see the Anaesthetist in a separate clinic before surgery, but this is not routine and not always necessary.

If you are a smoker, problems during/after surgery may be reduced and your recovery after surgery enhanced, if you are able to stop smoking for at least one week before surgery (ideally two weeks, or even permanently!). Smoking can make anaesthesia difficult and leaves you more prone to a chest infection or circulatory problems after surgery.

Some patients who live alone prefer to spend a week or two in a convalescent home, a hotel, or with relatives, before returning to their own home after surgery. The Nurse at the Pre-admission Assessment Clinic can help you with arrangements for a convalescent home, which should ideally be planned well before your operation.

6. PREPARATION FOR SURGERY – Admission to Hospital and timing of operation

You will be admitted to hospital a few hours before the operation, possibly the evening/day before, and will be seen by the Nursing Staff and Anaesthetist. Please ensure you bring any of your previous x-rays with you, any medication, your toiletries, clothing, etc. You will be unable to eat or drink fluids for 6 hours before surgery, unless advised otherwise – the exception will be to allow you to drink still water until 2-3 hours before the operation.

Some patients attend the hospital the evening before surgery to be seen by myself and the anaesthetist. Some insurance companies will not pay for a night in hospital before surgery, in which case we would still need to see you and then you go home or stay in a local hotel overnight. When you are seen the evening before surgery, we can be specific about the time of your operation and when to return to the hospital, which is usually between 06.30 and 12.00 the following day.

Some patients apply a moisturiser cream to their limbs. If this is your preference, please **do not** apply moisturiser to the affected hip/buttock/thigh/limb for 48 hours before surgery.

7. INFORMING YOUR GENERAL PRACTITIONER

Please make sure you tell your GP you will be in hospital, as they may be able to help you prepare for coming home again and may wish to visit you after discharge.

8. PRE-EXISTING MEDICATION

Generally you should continue all your medication until admission to hospital. However, there are some circumstances and other considerations where this may not be the case, and some of these are detailed below:

i. Non-Steroidal Anti-Inflammatory drugs (NSAIDS). Drugs such as Brufen or Neurofen (Ibuprofen), Voltarol (Diclofenac), Naprosyn (Naproxen), Celebrex, Meloxicam, etc. (there are many more) are all similar non-steroidal anti-inflammatory drugs and are used very effectively for pain relief. However, these drugs also affect the way your blood clots during surgery. You should stop these drugs around 7-10 days before surgery and use alternative painkillers, getting another prescription from your GP if necessary.

ii. Aspirin. Some patients take Aspirin for chest pain, or to prevent a small stroke or TIA - typically a low dose of 75mg (half a junior Aspirin). If you are taking low-dose-Aspirin, you may continue taking this as usual until the time of your admission and low-dose-Aspirin will probably continue again soon after surgery. If you are on a higher dose of Aspirin (more than 75mg per day), please let me or the Nurse know well in advance as this may need to be stopped/reduced around 10 days before surgery.

iii. Plavix (Clopidogrel), Warfarin and other blood thinning drugs. Some patients may be taking Plavix, typically for a heart problem, and this generally needs to be stopped 7-10 days before surgery. Certain anti-blood clotting drugs, such as Warfarin or Heparin will also need to be stopped, so again, please discuss this at the Clinic.

Many patients are now taking a new class of drugs to thin the blood, called ‘NOACs” or New Oral Anticoagulants, which might include Pradaxa (Dabigatran), Xalerato (Rivaroxaban), Eliquis (apixaban), etc. Generally the last dose of these is taken 3 days before surgery, so there are 2 full days without having taken the drug, but for some patients, these should be stopped earlier, so again, please check at the preadmission clinic.

iv. Methotrexate and other Rheumatoid Arthritis drugs. Some patients with rheumatoid arthritis take a drug called methotrexate and this will need to be stopped at least one week or so before surgery. Other patients take a Cytokine Inhibitor or anti-TNF drug, which will need to be stopped. Generally this will be considered in consultation with your Rheumatologist.

v. Diabetic Drugs. Some patients with Diabetes take a drug called metformin and this needs to be stopped just before surgery. Special arrangements will be necessary for patients on Insulin.

vi. Hormone Replacement Therapy (HRT) and the Oral Contraceptive Pill (OCP). Many types of HRT and OCP contain oestrogen, which can be associated with an increased risk of a thrombosis (blood clot), which is also a risk after hip replacement surgery. It is generally advised to stop HRT or the OCP 4-6 weeks prior to surgery and not to recommence these until 4-6 weeks later (unless the drug is a progesterone only medication). HRT can be in the form of oral tablets, patches applied to the skin, or tablets/cream inserted into the vagina. If you have stopped the OCP, then obviously alternative contraceptive precautions are necessary, until the OCP is established again.

9. THE TOTAL HIP REPLACEMENT OPERATION

Surgery is performed under a general anaesthetic, or under a regional anaesthetic (epidural or spinal injection in the back) to numb the legs – sometimes a combination of both is used. Medication to help you feel sleepy and relaxed may be given before surgery (a pre-med). This can all be discussed with the Anaesthetist when you meet them before surgery. The operation usually takes a couple of hours, but you will be away from the ward for 3 to 4 hours, by the time you have woken up from surgery and can return to the ward. The wound passes from the upper thigh, over the bony prominence of the hip and then back towards the bottom.

When you first come round after surgery, you will have an oxygen mask on and will be in the “Recovery Area”, near to the Operating Theatre. This is to allow close nursing observation and supervision before you return to the ward. You may have a triangular shaped pillow between your legs, to help control your legs initially and help keep the hip correctly in place.

You will have a tube (intravenous drip) in the arm, to give you fluid and antibiotics following surgery. Sometimes additional pain-relief, or a blood transfusion, is given through this drip. You may also have one or two tubes (drains) coming from your wound attached to a bottle - this collects fluid/blood which seeps from the operating site for a few hours after surgery. Some patients require a urinary catheter (tube into the bladder) for a period after surgery. Initially you will obviously have some pain from your operation site and this will be controlled either through the drip, with injections, or tablets once you are able to eat and drink.

Sometimes blood lost during and after the operation can be collected, washed or filtered and returned to you, this is known as “Re-Transfusion”. However, if the blood loss is too great for this technique, then you may need to be given a blood transfusion during or after the operation.

10. PROGRESS AFTER SURGERY

Everybody recovers at different speeds, dependent on your age, your general health and the nature of your surgery. As soon as you wake up after surgery and are able to, you should start wiggling your toes and feet, bending your foot and ankle up and down, 10 times every half an hour. This helps the circulation in your calf. You can gently try to bend your knee, rolling your thigh outwards at the same time. You will be allowed to sit up at approximately 40-50º in bed. For the first few days, you should do regular deep breathing exercises, to keep your lungs expanding, and to prevent a chest infection.

The day after surgery, some of the tubes attached to you will be removed. The Physiotherapist will see you, assisting you to stand and possibly walk – some patients manage to start mobilising out of bed on the day of surgery. On the second day after surgery, the Physiotherapist will again assist you with exercise, and start you walking with crutches.

You will soon be able to get out of bed and sit in a high chair and use the toilet with a raised seat. It is essential that you do not sit in a chair which is too low following surgery. Sitting in a low chair will allow your hip to flex (or bend) too far and this can cause a dislocation of the joint. During your stay in hospital, you should keep the pillow between your legs whilst in bed.

With help from the Physiotherapist and Nursing Staff, your mobility will gradually increase and your independence will improve.

The wound is covered with a white absorbent and plastic dressing. Sometimes fluid accumulates under this dressing, so this may need to be changed. This type of dressing is water resistant, so you can use a shower safely. Stitches may be buried underneath the skin and do not need to be removed, or sometimes metal staples are used, which are removed around 13-14 days after surgery.

11. GOING HOME

Most patients go home around 2 days following surgery – some may go earlier and others may need a longer hospital stay. Before you go home, arrangements can be made for the hire or purchase of certain aids, including a toilet seat raise, shower chair, walking frame, crutches, walking sticks and a gadget to help you put on stockings or socks. The Physiotherapist will discuss this with you.

Please think about your home environment before you come into hospital and discuss any problems with the Medical Staff, Nursing Staff, or your Physiotherapist. You may have stairs at home and the Physiotherapist will assist you to safely climb stairs again.

You will be given some surgical elastic support stockings to wear in hospital, to help reduce the risk of blood clots forming in your legs during and after surgery. Previously, patients would wear the stockings for 6 weeks following surgery, if tolerated during this period. NICE have recently revised the guidelines and these are no longer required after leaving hospital; however, many patients find that wearing the stockings, especially on the operated leg in the day time for a few weeks, reduces swelling, so try to continue for a few weeks if you can manage.

If you live alone, you will find it helpful for a friend or relative to stay with you for a short while after you first return home. If your bed is upstairs, you may wish to consider bringing the bed downstairs initially. If access to a toilet is difficult, possibly a commode would be helpful. You will also need someone to help you with domestic chores and you may have difficulty getting to the shops, so will need someone to do your shopping.

Once you are home, continue with the exercise regime you discussed with the Physiotherapist. Always try to get out of bed on the same side as your operation for the first 6-8 weeks. Also, lie flat on your bed for half an hour twice a day, which will help stretch your hip. Sleep with a pillow between your legs for the first 6 weeks. When you are sitting, be it on a chair or a bed, never let your knee be higher than your hip. If this does happen, your hip will bend (or flex) too far, and may pop out of joint (dislocate). Likewise, when you get up from a chair, shuffle yourself to the front of the chair and push up from the arms, without leaning forward too far. Again, if you lean forward too far this may flex (or bend) your hip too far, and the hip may pop out of joint.

It is advisable to go for walks on a daily basis. As the days go by, you will gradually be able to walk a greater distance. For the first 6 weeks you should expect to walk initially with 2 crutches. Some people are allowed to walk without the support of crutches at an earlier stage; others may need crutches for longer. You will be seen in Clinic about 6 weeks after surgery.

Even in the long-term, many people find a walking stick helpful after a joint replacement and it helps to boosts your confidence - you would need to hold it in the opposite hand.

Most patients start driving 6-8 weeks after surgery, if they have a manual car. If you have had left hip surgery and drive an automatic car, you may be able to start driving at an earlier stage – 2-4 weeks. You should let your car insurance company know that you have had a hip replacement.

The most difficult part of your recovery is the first few days following surgery. You will also find it difficult for the first few days when you get home. The most rapid improvement is expected in the first 6-8 weeks, but you will continue getting an improvement, with your hip feeling more comfortable, your range of movement improving, and your confidence improving, for several months. Many patients report progressive improvement for 12 months or more after the operation.

Even in the long-term, there is a small risk your hip can dislocate and pop out of joint. Remember always to sit on a chair with your hip higher than your knees. Try to sit down with your legs slightly apart. Do not cross your legs above the knee. Be careful sitting in a bath and preferably use a shower, especially for the first few months after surgery. Generally, it is safe to bend your hip up and let your thigh turn/roll outwards, but **do not** bend your hip up and turn/roll your thigh inwards.

12. WHAT ARE THE RISKS?

A hip replacement is a major surgical operation and usually a very successful operation. 90-95% of people come into hospital, have the operation, go home again and recover with no particular problems. Surgery should not be undertaken lightly and it is inevitable that with major surgery that there are some risks. A small proportion of patients do have lasting symptoms, which are difficult to account for, explain, or rectify.

The common risks are discussed below. These are risks you should be aware of, but of course try not to worry about them too much. Remember again that over 90-95% of people are very pleased with their hip replacement, their pain is relieved, and their quality of life is dramatically improved.

1. Infection. With current operating theatre facilities, careful surgical techniques and antibiotics, infection is a rare complication. It is, however, a very very serious complication and on a few occasions the artificial joint replacement needs to be removed to control the infection.

2. Blood Clots. Blood can clot in the legs following surgery, causing a 'thrombosis'. To try and prevent this, various measures are taken whilst you are in hospital and you are given special stockings to wear. Occasionally a blood clot can break off and go to your lungs (an embolism), causing chest pain and/or severe breathing problems. To reduce the risk of a blood clot developing, the majority of patients are treated with a daily injection of Heparin, to thin the blood stream. This is usually continued for 2 weeks after surgery, with patients (or a relative) trained to inject themselves after discharge from hospital, followed by another 4 weeks on Aspirin 75mg daily. Most patients find this much easier than they had expected. On some occasions, a blood thinning tablet can be prescribed instead of the injection and aspirin to continue until 5 weeks after surgery. For insured patients, the cost of these injections/tablets after leaving hospital are often not covered by the insurance policy. You will need to ask your GP if they are able/willing to continue the prescription, but many are prevented from doing so, in which case the Hospital pharmacy can supply the injections, for a modest fee.

3. Chest and Urinary Tract Infections. These are common to all surgical procedures. You can try and prevent a chest infection with breathing exercises.

4. Dislocation. This is most common in the early period following surgery, but can occur in the medium and long term. Often this is caused by crossing your legs, twisting badly on your leg, or sitting in a low chair. Usually a brief anaesthetic is required to get the hip back into joint. On rare occasions the hip may need to be revised (re-done with further surgery) to control this problem, if it becomes recurrent.

5. Leg Length. We always try to give you equal leg length following surgery, but some variation is common and sometimes the leg is lengthened. Usually this is not noticeable, but on rare occasions, the heel and sole of one or other of your shoes may need to be raised. Even before surgery, some patients have had unequal leg length for many years and become accustomed to this, often without even noticing it.

6. Nerve damage. There are major nerves around your hip and these can occasionally be stretched or damaged, leading to profound weakness and loss of feeling in your thigh, leg or foot, which can sometimes be painful.

7. Stroke and major chest problems, such as a small heart attack. These are very occasional, but catastrophic consequences of any major operation. Whilst extremely unlikely to happen, when an operation is recommended, this is always a consideration. Very rarely, someone can have a major heart attack, major stroke, or other medical problem, from which they do not recover. There is a very small mortality rate (risk of death) with such major surgery.

8. Loosening, wear and long term failure. It is inevitable that all hip replacements wear with the passage of time. Failure of a hip replacement is usually caused by loosening. It is very rare that components themselves break. Loosening is a progressive problem, over many years. As a rough guide, 15% of hip replacements will fail (need to re-done for a variety of reasons) by 15 years, but around 80-85% of hip replacements are still in place and functioning well 15 years after surgery. On rare occasions there can be problems in the early period after surgery, necessitating further surgery.

9. Swelling. It is common for your leg and ankle to be a little swollen for some time after surgery. This gradually improves over a period of weeks or months. If you are concerned about this after discharge from hospital, you should see your GP or Specialist again. It may help to elevate the foot of your bed by 10-15cms, or put some old duvets/blankets under the end of the mattress, for a few weeks after surgery.

10. Other medical problems. Major surgery can sometimes be followed by other unexpected medical problems. These could include poor kidney function with reduced urine output, the gut temporarily failing to function, constipation, poor bladder function, a chest infection, etc. To try and prevent constipation, which can be exacerbated by the pain

killers required after surgery, laxatives are often prescribed. Many patients often report feeling tired for several weeks after surgery.

11. Anaesthesia, both general and regional, for any operation carries risks of its' own. These risks are small, but can be significant, and will be discussed with you by the Anaesthetist when they see you before the operation.

12. Trochanteric Bursitis. Some patients develop discomfort/pain/tenderness after surgery, over the hip wound and bony prominence of the hip, described as '*Trochanteric* Bursitis', which can cause irritation for some time in a minority of patients. Generally this settles with time, facilitated by physiotherapy and/or an injection to the tender area, but occasionally persists and rarely can be difficult to resolve.

13. OTHER POINTS TO CONSIDER

1. Sitting. As already mentioned, avoid sitting in low chairs. When you stand up from a chair, keep your operated leg in front of you and take the weight through your unoperated leg. You should shuffle forwards to the edge of the chair before attempting to stand and push up with your arms. Sitting down is the reverse process of standing, gently lowering yourself to the front of your chair, taking weight through your unoperated leg. Remember not to cross your legs when sitting.

2. Sleeping. Sleep on your back for the first 6 weeks following surgery, keeping the pillow between your legs at night during this period. Later on it is usually better to sleep on your operated leg. Some patients really struggle to sleep on their back, so if this is an issue, you could purchase a Slumber Support, which is a large foam pad to place between the thighs at night, with the operated limb supported and uppermost (https://cambridgefutons.com/futon-and-mattress-shop/slumber-support).

3. Getting out of bed. Get out of bed on the same side as your operation for the first few weeks, if possible. Again, standing up from bed is similar to standing up after sitting in a chair. If your bed is very low, you may need to have a higher bed.

4. Driving. When you are driving or a passenger, if possible use a two-door car and have the seat as far back as possible. Gently lower yourself into the car, taking weight through

your unoperated leg, keeping your operated leg straight in front of you. You can start driving again, usually 6-8 weeks following surgery, unless you have had a left hip replacement and have an automatic car, in which case you can start driving after 2-3 weeks. You must be able to do an emergency stop and should inform your insurance company before you start driving.

5. Sexual intercourse. You can soon enjoy normal sexual activity following surgery. Remember that you must not bend your hip further than a right angle, or 90º, but it is usually safe to let your knees roll up and out. Initially it is best for you to be on your back, but as time goes by, you will be able to become more adventurous.

6. Toilet seat raise. You should continue to use this for 6-8 weeks after surgery.

7. Socks and shoes. If you have difficulty putting on shoes or stockings, use a long shoe horn, or a special gadget which is available from the Physiotherapist to help.

8. Sports and hobbies. Unless you have particular problems, you can re-start hobbies such as gardening, bowling, gentle dancing, golf and cycling around 3 months after surgery. You can start swimming 3 weeks after surgery, once the wound is well healed. Contact sports should be avoided, as should vigorous exercise. If you are swimming, it is traditional to recommend avoiding breaststroke as some patients loose the rotational kick required, but many can still manage breaststroke. Many patients return to playing doubles tennis. Some patients return to skiing and other more extreme activities, but rather at their own peril.

14. RETURN TO WORK

Most employed professionals working at a desk, can return to work 6–8 weeks following surgery. Patients who undertake more manual work, on their feet all day, may need up to 3 months away from work following surgery. Some patient who work at a desk from home will return to work after 2-3 weeks. Of course you can start communicating by telephone and e-mail at an early stage, but remember that you will feel tired following surgery and need to set aside time to recover, undertake physiotherapy, do your exercise, go out for walks, etc. Therefore, do not be too ambitious about trying to return to work too early.

15. REVISION SURGERY

As already mentioned, a few hip replacements do run into early problems. Some hip replacements wear out or loosen and become de-bonded from the bone at a later date, with a recurrence of pain, requiring a re-do of the replacement. Further surgery is described as “Revision Surgery”.

Revision surgery is complicated and the nature of surgery required is different in every case. However, the general principles of surgery are exactly the same, although the duration of surgery and the post-operative recovery is more prolonged. Different or more specialised implants are required to reconstruct the hip, sometimes using bone graft. The general plan of post-operative mobilisation, care and precautions are often identical. Sometimes it is necessary to avoid weight bearing for the first few weeks and keep you walking with crutches for longer. Unfortunately, as a revision procedure is a more major operation, the potential complications are also greater.

16. AIDS AND SUPPORT AFTER SURGERY

The Physiotherapists can advise you about obtaining a toilet seat raise, walking aids, commodes, shoe and stocking gadgets. Some of these they can supply, others may need to come from the Red Cross.

17. COMMENT

The practise of medicine and surgery is not an exact science and reputable practitioners cannot properly guarantee results, either expressed or implied. Hip replacement surgery is highly advanced and discussion about this (including risks and benefits) should be with your specialist. This booklet is intended to improve your understanding of the procedure, recovery, expectations and risks. However, everybody’s circumstances differ and this booklet is not intended to cover every eventuality. Please do not hesitate to ask further queries if you any more concerns or require additional information. No question is too trivial, so do please ask me, my PA/secretary, the Anaesthetist, nursing staff, etc, etc, if you need any more information.

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