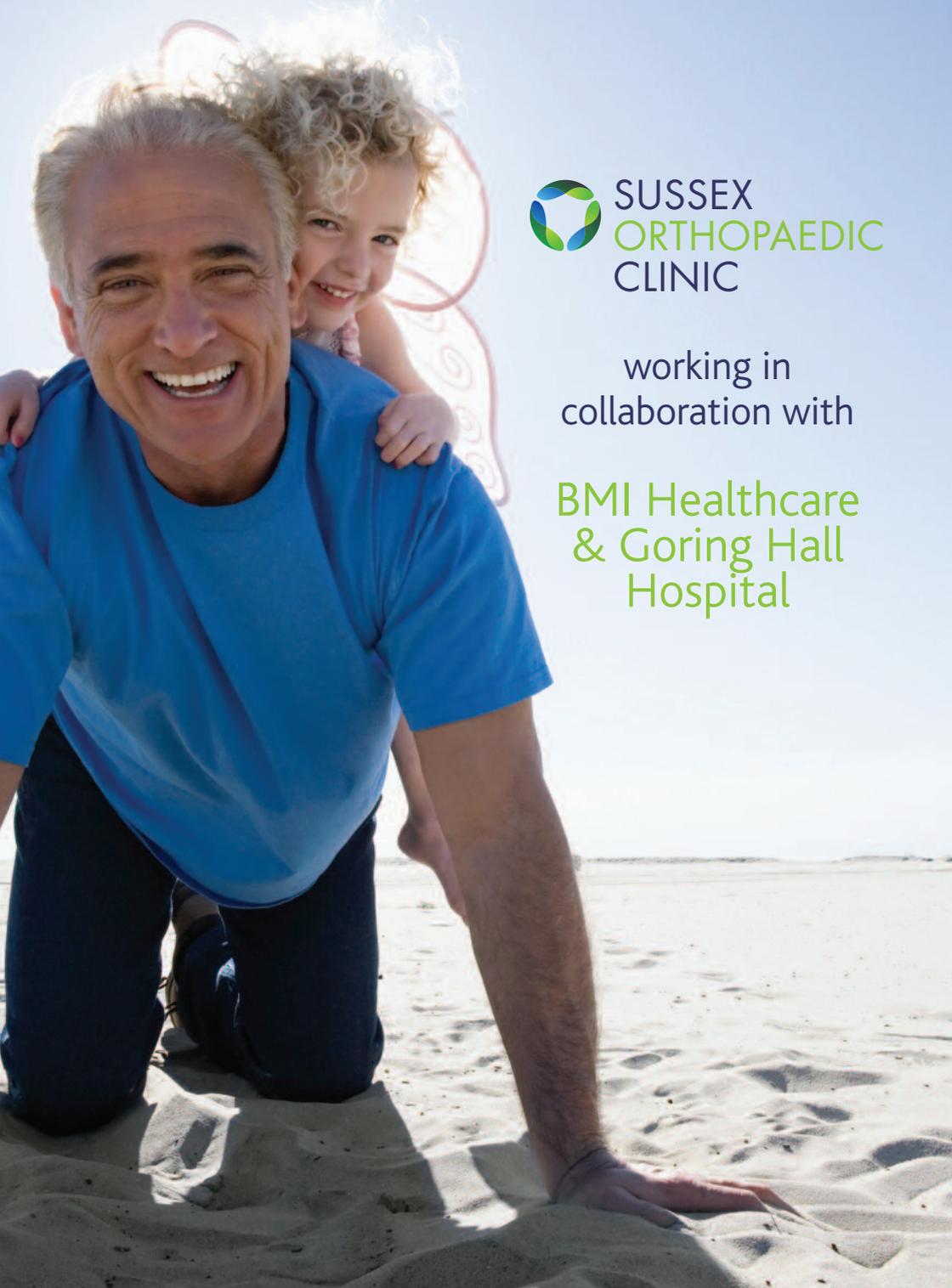




Enhanced Recovery Program



Improved Award-Winning
Enhanced Recovery Program



 SUSSEX
ORTHOPAEDIC
CLINIC

working in
collaboration with

BMI Healthcare
& Goring Hall
Hospital

Our improved, award-winning Enhanced Recovery Programme

The program is specifically designed to make your joint replacement/ resurfacing experience easier, with a quicker and more predicable recovery.

At its simplest level joint replacement entails changing a painful joint for a pain free joint. Historically the manner in which this was carried out meant the recovery could be arduous and painful.

The award-winning programme focuses on comfort, eating and drinking, early mobilisation, feeling "well" and finally, getting some sleep at night. The programme also works hard to avoid transfusions, drips, wedges, drains and the morphine pain pumps of the past.

The programme is included in your care without additional cost. It has been developed and regularly refined over two years and it includes new equipment such as a state of the art blood-recycling machine - which costs £18 000!

"I just wanted to let you know how right you were about the general anaesthetic v spinal block. My recovery has been so much more 'enhanced' this time.

One week on and I can walk without any stick around the house and can do the stairs normally, although I am trying to stop myself doing this only for fear of overstretching the wound.

I feel so well that I am bored already waiting for the wound to heal.

Thank you for your excellent work on me. Kind Regards."

Rapid Recovery

Attention to detail has led to considerable refinements in preparation, anaesthesia, surgery and aftercare. The goal, and very much realistic expectation is that:

- 1 Within 30 minutes of your operation you will be able to sit up and have a drink of water, and then have tea and biscuits at 1-2 hours following your operation.
- 2 Approximately 3-4 hours following your surgery you will be able to get out of bed, place your full weight through your new joint replacement and walk 15 meters. (The timing can vary from patient to patient)
- 3 In the evening you should be able to sit out and have your chosen evening meal.



General anaesthetic is avoided in most patients; the preferred approach is a low dose spinal anaesthetic (similar to an epidural) combined with intravenous sedation such that you snooze through the operation. The spinal anaesthetic involves an injection of local anaesthetic (the same local anaesthetic as is typically used at the Dentist) placed in the low back to completely numb the nerves to the legs. This allows the operation to be done with no pain.

At completion of your operation the sedation is turned off. Typically you will wake up alert and fresh. A few hours later be able to eat and enjoy the highly rated hospital food. You would be expected to have no pain, because you will still be comfortably numb from the waist down. You will be free of an intravenous drip.

Approximately 3-4 hours later the feeling and strength returns, then you can commence walking with the physiotherapist and a walking frame for stability. Furthermore at surgery local anaesthetic was injected around the soft tissues of your new joint replacement to keep the area comfortable; this lasts for approximately 18-24 hours.

Comfort levels are generally good; often patients will remark "what pain?"

Please note the choice of anaesthetic is always yours, specifically you may opt for a general anaesthetic.

A positive approach

A positive approach and looking forward to your surgery and its benefits are very important. Removing as many of the anxieties as possible with clear education, explanation and understanding of what can be expected makes for a much easier experience.

Consider the example if you are travelling to a new place for the first time it can be quite stressful. However if you are going to a familiar place, it becomes a very much an easier experience. The analogy applies to joint replacement surgery and is often seen when a patient undergoes a second side following an initial other-sided procedure. Therefore as much understanding and preparation before makes for a much more relaxed experience. We will help with written materials and face-to-face explanations. Try closing your eyes and picturing everything going well with a positive and progressive recovery. Make the pictures bigger and brighter, and smile! Repeat often!



Spinal Anaesthesia

Your anaesthetic will be delivered by highly trained consultant anaesthetists. They are specifically qualified to make a full assessment of your state of health and form the most appropriate anaesthetic plan for you – a spinal anaesthetic is one of several options, which may have marginal or more definite benefits for you as an individual over a general anaesthetic.

There are risks associated with most aspects of medical intervention. A view on the benefit vs. risk balance is taken for all aspects of medical care.

In the process of giving one's consent for a procedure, one should have the facts about the common and the uncommon but important risks/complications.

The specific risks of a spinal anaesthetic are included in the appended booklet from the Royal College of anaesthetists. There is some more recent data from the third National Audit Project (1).



Benefits & Risks

The Benefits of a spinal for joint replacement surgery are:

- Less bleeding and therefore lower transfusion risk,
- No pain at the end of the operation,
- Lower thrombosis risk
- Believed to lead to lower levels of pain compared to not having a spinal for a given surgery
- Avoidance of general anaesthetic.
- Reduction of morphine-like medicines

The risks include:

- Permanent neurological harm with a peri-operative spinal:
Overall 1:38,000 (Pessimistic)
to 1 in 63,000 (Optimistic)
Paraplegia & death 1:47,000 (Pessimistic)
to 1 in 95,000 (Optimistic)
- Temporary urinary catheter (until spinal has worn off)
- Failure of spinal anaesthetic to work properly (technical reasons)
Note: the spinal anaesthetic is always tested prior to starting surgery to make sure it is working properly)
- Headache, known as a spinal headache. Risk is 1:500, treatment may involve an injection of your own blood, known as a blood patch, near to where the original spinal needle was placed.



You have a choice between spinal anaesthetic and a general anaesthetic.

The Caveat: Sometimes a spinal might not be possible, sometimes a specific anaesthetic will be advised on medical reasons.

Your spinal anaesthetic

Information for patients



This booklet explains what to expect when you have an operation with a spinal anaesthetic. It has been written by patients, patient representatives and anaesthetists, working in partnership.

You can find more information in other leaflets in the series on the website **www.rcoa.ac.uk/patientinfo**. They may also be available from the anaesthetic department in your hospital.

The series includes the following:

- Anaesthesia explained (a more detailed booklet)
- You and your anaesthetic (a shorter summary)
- Your child's general anaesthetic
- Epidurals for pain relief after surgery
- Headache after an epidural or spinal anaesthetic
- Your child's general anaesthetic for dental treatment
- Local anaesthesia for your eye operation
- Your tonsillectomy as day surgery
- Your anaesthetic for aortic surgery
- Anaesthetic choices for hip or knee replacement

Risks associated with your anaesthetic

A collection of 14 articles about specific risks associated with having an anaesthetic has been developed to supplement the patient information leaflets. The risk articles are available on the website **www.rcoa.ac.uk/patientinfo**.

Throughout this booklet we use these symbols:



To highlight your options or choices



To highlight where you may want to take action



To point you to more information

Introduction

Having a spinal anaesthetic for your operation

This leaflet explains:

- **what** a spinal anaesthetic is
- **how** it works, and
- **why** you could benefit from having one for your operation.

For many operations, patients receive a general anaesthetic which produces a state of controlled unconsciousness during the operation. A spinal anaesthetic ('a spinal') may be used instead for some operations below the level of the waist. Depending on the type of operation and your own medical condition, a spinal anaesthetic may sometimes be safer for you and suit you better than a general anaesthetic.



You can normally choose:

- to remain fully conscious
- to have some sedation during your operation. This makes you relaxed and drowsy although you remain conscious
- or occasionally a spinal anaesthetic may be combined with a general anaesthetic.

Almost any operation performed below the waistline is suitable for a spinal and there are benefits to both you and your surgeon when a spinal is used.

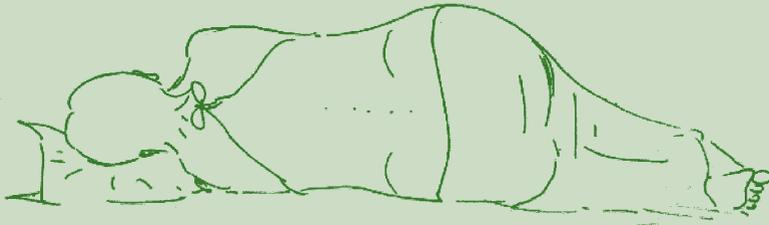
What is a spinal?

A local anaesthetic drug is injected through a needle into the small of your back to numb the nerves from the waist down to the toes for two to three hours.

How is the spinal performed?

- 1** Your anaesthetist will discuss the procedure with you beforehand on the ward.
- 2** You will meet an anaesthetic assistant who will stay with you during your time in the theatre.
- 3** A needle will be used to insert a thin plastic tube (a 'cannula') into a vein in your hand or arm and then the staff looking after you will help you into the correct position for the spinal.
- 4** You will either sit on the side of the bed with your feet on a low stool or lie on your side, curled up with your knees tucked up towards your chest. In either case, the staff will support and reassure you during the injection.





- 5 The anaesthetist will explain what is happening throughout the process so that you are aware of what is taking place 'behind your back'.
- 6 Your anaesthetist will give you the spinal injection and stay with you throughout the operation.
- 7 As the spinal begins to take effect, your anaesthetist will measure its progress and test its effectiveness.

→ What will I feel ?

Usually, a spinal should cause you no unpleasant feelings and should take only a few minutes to perform.

- As the injection is made you may feel pins and needles or a sharp tingle in one of your legs – **if you do, try to remain still, and tell your anaesthetist about it** (see side effects and complications).
- When the injection is finished you normally lie flat as the spinal works quickly and is usually effective within 5–10 minutes.
- To start with the skin feels numb to touch and the leg muscles are weak.
- When the injection is working fully you will be unable to move your legs or feel any pain below the waist.

Your spinal anaesthetic

- During the operation you may be given oxygen to breathe via a lightweight, clear plastic mask to improve oxygen levels in your blood.

Only when both you and the anaesthetist are completely happy that the anaesthetic has taken effect will you be prepared for the operation.

Why have a spinal?

Advantages, there may be:

- less risk of chest infections after surgery
- less effect on the heart and lungs
- excellent pain relief immediately after surgery
- less need for strong pain relieving drugs
- less sickness and vomiting
- earlier return to drinking and eating after surgery
- less confusion after the operation in older people.

With a spinal, you can communicate with the anaesthetist and surgeon before, during and after surgery. If an operating camera is being used, you may even be able to watch the operation on television if you wish!

Alternatively, you may decide that you wish to have sedation while the operation is in progress.

Operations a spinal is commonly/often used for:

- orthopaedic surgery – any major operation on the leg bones or joints
- general surgery – hernia repair, varicose veins, piles (haemorrhoids)
- vascular surgery – repairs to the blood vessels of the leg
- gynaecology – vaginal repair or operations on the bladder outlet
- urology – prostate removal, bladder operations and genital surgery.

However, you may still need a general anaesthetic if:

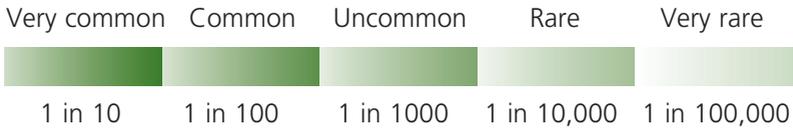
- your anaesthetist cannot perform the spinal satisfactorily
- the spinal does not work satisfactorily
- the surgery is more complicated than expected.

Side effects and complications

As with all anaesthetic techniques there is a possibility of unwanted side effects or complications.

People vary in how they interpret words and numbers.

This scale is provided to help.



Very common and common side effects

These may be unpleasant, but can be treated and do not last long.

- **Low blood pressure** – As the spinal takes effect, it can lower your blood pressure and make you feel faint or sick. This can be controlled with the fluids given by the drip and by giving you drugs to raise your blood pressure.
- **Itching** – This can occur as a side effect of using morphine-like drugs in combination with local anaesthetic drugs in spinal anaesthesia. If you experience itching it can be treated, as long as you tell the staff when it occurs.

- **Difficulty passing water (urinary retention)** – You may find it difficult to empty your bladder normally for as long as the spinal lasts. Your bladder function returns to normal after the spinal wears off. You may require a catheter to be placed in your bladder temporarily, either while the spinal wears off or as part of the surgical procedure.



- **Pain during the injection** – As previously mentioned, you should immediately tell your anaesthetist if you feel any pain or pins and needles in your legs or bottom as this may indicate irritation or damage to a nerve and the needle will need to be repositioned.
- **Headache** – There are many causes of headache, including the anaesthetic, the operation, dehydration and anxiety. Most headaches get better within a few hours and can be treated with pain relieving medicines. Severe headache can occur after a spinal anaesthetic. If this happens to you, your nurses should ask the anaesthetist to come and see you. You may need special treatment to settle the headache.

Rare complications

Nerve damage – This is a rare complication of spinal anaesthesia. Temporary loss of sensation, pins and needles and sometimes muscle weakness may last for a few days or even weeks but almost all of these make a full recovery in time. Permanent nerve damage is very rare. Detailed information about these risks is available from www.rcoa.ac.uk/patientinfo under the section 'Risks associated with having an anaesthetic'. These risks can be discussed further with your anaesthetist who can take into account your personal circumstances.

After your spinal

- Your nurses will make sure that the numb area is protected from pressure and injury until sensation returns.
- It takes 1.5 to four hours for feeling (sensation) to return to the area of your body that is numb. **You should tell the ward staff about any concerns or worries you may have.**
- As sensation returns you may experience some tingling in the skin as the spinal wears off. At this point you may become aware of some pain from the operation site and you should ask for more pain relief before the pain becomes too obvious.
- As the spinal anaesthetic wears off, please ask for help when you first get out of bed.
- You can normally drink fluids within an hour of the operation and may also be able to eat a light diet.

Frequently asked questions

Q Can I eat and drink before my spinal?

You will need to have an empty stomach before your operation and you must follow the same rules as if you were going to have a general anaesthetic. This is because it is occasionally necessary to change from a spinal anaesthetic to a general anaesthetic. The hospital should give you clear instructions about fasting.

Q Must I stay fully conscious?



Before the operation you and your anaesthetist can decide together whether you remain fully awake during the operation or would prefer to be sedated so that you are not so aware of the whole process. The amount of sedation can be adjusted so that you are aware but not anxious. It is also possible to combine a spinal with a light general anaesthetic.

Q Will I see what is happening to me?



Sometimes you can choose. Normally a screen is placed across your upper chest so that you see nothing when surgery starts. Some operations use video cameras and telescopes for 'keyhole' surgery and many patients like to see what is happening to them on the video screen. You will be aware of the 'hustle and bustle' of the operating theatre when you come in. Once surgery starts noise levels drop. You will be able to relax, with your nurse and your anaesthetist looking after you. Some patients like to wear personal stereo headphones to listen to their own choice of music during the operation. The options available to you will vary, depending on a number of factors to do with your operation. You will be able to discuss all these possibilities with your anaesthetist at the preoperative visit.

Q Do I have a choice of anaesthetic?



Yes. Your anaesthetist will assess your overall preferences and needs for the surgery and discuss them with you. If you have anxieties regarding the spinal then these should be answered during your discussions, as it is usually possible to accommodate individual patients' wishes and still use a spinal anaesthetic.

Q Can I refuse to have the spinal?

Yes. If, following discussion with your anaesthetist, you are still unhappy about having a spinal anaesthetic you can always say no. You will never be forced to have any anaesthetic procedure that you don't want.

Q Will I feel anything during the operation?

Your anaesthetist will not permit surgery to begin until you are both convinced that the spinal is working properly. You will be tested several times to make sure of this. You should not feel any pain during the operation but you may well be aware of other sensations such as movement or pressure as the surgical team carry out their work.



Q Should I tell the anaesthetist anything during the operation?

Yes, your anaesthetist will want to know about any sensations or other feelings you experience during the operation. They will make adjustments to your care throughout the operation and be able to explain things to you.

Q Is a spinal the same as an epidural?

No, although they both involve an injection of local anaesthetic between the bones of the spine in the small of your back, the injections work in a slightly different way.



Q Where can I learn more about spinals?

This leaflet is designed to give you a brief overview about your spinal anaesthetic. If you would like more detailed information, speak to your anaesthetist or contact the anaesthetic department in your local hospital or the following organisations.

Useful organisations

The Royal College of Anaesthetists

Churchill House
35 Red Lion Square
London WC1R 4SG
Tel: 020 7092 1500

website: www.rcoa.ac.uk
E-mail: info@rcoa.ac.uk
Fax: 020 7092 1730

This organisation is responsible for standards in anaesthesia, critical care and pain management throughout the UK.

The Association of Anaesthetists of Great Britain and Ireland

21 Portland Place
London WC1B 1PY
Tel: 020 7631 1650

website: www.aagbi.org
E-mail: info@aagbi.org
Fax: 020 7631 4352

This organisation works to promote the development of anaesthesia and the welfare of anaesthetists and their patients in Great Britain and Ireland.

The European Society of Regional Anaesthesia and Pain Therapy

c/o Department of Anaesthetics
The Alexandra Hospital
Woodrow Drive

Redditch
Worcestershire B98 7UB

website: www.esraeurope.org
Tel/Fax: 01527 512047

This organisation works to further regional anaesthesia in Europe.

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Questions you may like to ask your anaesthetist

Q Who will give my anaesthetic?

Q Do I have to have this type of anaesthetic?

Q Have you often used this type of anaesthetic?

Q What are the risks of this type of anaesthetic?

Q Do I have any special risks?

Q How will I feel afterwards?

Tell us what you think

We welcome suggestions to improve this booklet.

You should send these to:

The Patient Information Unit
Churchill House
35 Red Lion Square
London WC1R 4SG
email: standards@rcoa.ac.uk

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This leaflet will be reviewed within five years of the date of publication



The Royal College of Anaesthetists



The Association of Anaesthetists of Great Britain and Ireland



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