

Patient information factsheet

Having a neurosurgical or spinal operation in the prone position

We have given you this factsheet because you are due to have a neurosurgical or spinal operation. For this operation, you will need to be lying on your front, which is known as the 'prone' position.

We will give you your general anaesthetic (medicine to put you to sleep) while you are lying on your back, and then turn you onto your front into the prone position for part or all of the operation.

Risks

Lying in the prone position for a long time can lead to certain risks. We have listed the risks involved below. We will take great care to choose the best position for you for your operation and reduce these risks as much as possible. You will have opportunities to talk to your surgical and anaesthetic teams before your operation. Please ask us if you have any questions.

Stiffness and joint pain

If you stay still in one position for a long time, you may have some stiffness or discomfort in your joints. This is most common in your neck and shoulders, but it can affect other joints too.

Please tell us before your operation if there are any areas that we need to pay special attention to while you are asleep. For example, tell us if you have had a major operation on one of your joints in the past or if you have any limitations to your movement.

Stiffness and joint pain should get better quickly after your operation. However, some people find that it takes longer or they need physiotherapy to help them get better.

Skin damage

After your operation, you may notice some red marks in the areas where your body was supported, such as your forehead, tip of your nose, cheeks, chin, chest, breasts, hips and knees. Occasionally, these can develop into pressure sores or bruising. Very occasionally, you may notice some minor skin abrasions (grazes).

Redness on your skin will usually go away within 24 hours, but pressure sores and bruising will take longer.

Large breasts are more vulnerable to direct pressure and people with breast implants are more at risk. Please tell us if you have breast implants.

Nerve damage

If there is prolonged pressure around the nerves that control sensation and movement in an area of your body, this can sometimes result in nerve damage.

Symptoms of nerve damage usually begin immediately, but sometimes they may be delayed. Symptoms include weakness, changes in sensation or even pain in the area affected by the damaged nerve. The prone position usually affects the nerves around the armpit and elbow.

Nerve damage usually settles by itself, but in rare cases, the injury can be prolonged or even permanent. Please tell us as soon as possible if you notice any symptoms of nerve damage.

Swelling

It's common to have swelling in your face after the operation, particularly around your eyes and mouth. The swelling usually goes down within hours.

Loss of vision

We will take special care to protect your eyes and keep them free from any pressure during your operation.

However, there have been very rare cases of loss of vision or even blindness after an operation in the prone position. For most people who are having a straightforward operation (less than a few hours long), this risk will be very low.

Some people are at greater risk. This includes people who are overweight, people who smoke, people who have previously had a heart attack or stroke, and people with other major health problems, such as high blood pressure, diabetes or eye conditions. The risk is also higher if the operation is long or if there is a lot of blood loss.

An individual person's risk of loss of vision will depend on whether they have any of these risk factors, but in general, the risk is most often quoted as one in 5000.

Other complications

Having an operation in the prone position can increase a person's risk of heart, lung, liver and neurological (brain) complications, such as heart attack or stroke.

This risk is higher for people who already have severe breathing or heart problems. It is difficult to know how each person will respond and in rare circumstances, it may not be possible to continue with the operation.

Minimising the risks during your operation

Everyone involved in your operation is specially trained to keep you safe. The anaesthetic and surgical teams will assess and position you carefully to make sure we keep the risks as low as possible.

We will do this by:

- carefully padding vulnerable areas
- positioning you in a way which avoids stretching nerves as much as possible
- avoiding any pressure on your eyes
- closely monitoring your breathing and blood pressure

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If you have any problems after your operation

If you notice any problems while you are in hospital after your operation, tell the team looking after you on the ward and ask them to let your surgeon or anaesthetist know. We may need to do some tests or refer you to another specialist, depending on the problem.

If you notice any problems after you leave hospital, contact your GP or use the contact details given to you when you left hospital.

Contact us

If you would like to discuss any of the risks we have mentioned in this factsheet, please speak to your anaesthetist and surgeon before your operation. We will be able to tell you which risks relate to you and the operation you are having.

To speak to our admissions teams, please use the following telephone numbers:

023 8120 4018

023 8120 5510

023 8120 6784

If you have any questions or worries on the day of your operation, please contact the day of surgery unit team on telephone: **023 8120 3256**.

This patient information factsheet is based on 'Information for patients and families: risks associated with prone positioning during general anaesthesia' by Magdalena Smith and Sally Wilson for the Neuroanaesthesia and Critical Care Society. It has been adapted for UHS under Creative Commons License CC BY-NC-SA 4.0

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