PATIENT INFORMATION LEAFLET

This leaflet explains prone (face-down) positioning for neurosurgery.

NHS Greater Glasgow and Clyde

Prone Positioning for Neurosurgery

Issued: 02/04/2021. Date of Next Review: 02/04/2023

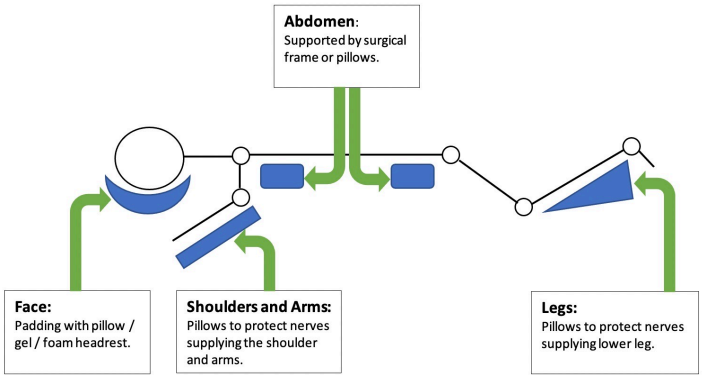
Why do we prone you?

- The prone position is required to allow surgical access for procedures on the brain and spine.
- After undergoing a general anaesthetic, the operating team will carefully move you into this position on a specialised padded frame.
- Complications may occur due to the effects of pressure on different areas of the body.
- This is minimised by careful positioning and padding of important areas such as the face, arms and legs.

How do we prone you?

You will be carefully assessed by the anaesthetic and surgical teams to estimate and limit these risks. The highly experienced theatre team will minimise the risks by:

- Careful padding of vulnerable areas.
- Positioning you in a way which avoids stretching nerves as much as possible.
- Avoiding any pressure on the eyes with pillows or a specialised foam / gel headrest to support your face and head.
- Making sure that your breathing and blood pressure are always satisfactory.



An example of a prone positioning and protective padding used.
Diagram used with kind permission of Dr Geoffrey Warnock, Consultant Anaesthetist, NHS Greater Glasgow & Clyde.

Risks with the prone position

1) Stiffness and joint immobility

- Lying in one position for a long time may result in some stiffness or discomfort in your joints – most commonly the neck and shoulders.
- Please let us know beforehand if there are any areas that we need to pay special attention to while you are asleep.

2) Skin Marking / Damage

- After surgery you may notice marking to areas where your body was supported such as the face, chest, breasts, hips and knees.
- This is quite common and usually resolves within 24 hours.
- Occasionally these might develop into pressure sores or bruising which will take longer to resolve than any red marks.

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3) Nerve Damage

- Prolonged pressure on or close to nerves can result in damage. This can affect your arms or legs.
- Symptoms you may notice include: numbness, pins and needles, weakness, or even pain.
- Symptoms usually begin immediately after your surgery.
- In most cases, these symptoms will resolve over the next dew days.

4) Eyes and Face

- A common effect after prone positioning is swelling of the face, particularly around the eyes, mouth, and lips.
- This usually resolves within a few hours.

5) Vision

- There have been very rare cases of visual loss or even blindness after prone surgery.
- The risk of visual loss varies, but is most frequently quoted between 1 in 125000 and 1 in 40000 patients *[equivalent to one person in a large town]*.
- Smoking, high blood pressure, diabetes, or pre-existing eye conditions confer a higher risk, as does a long operation time.

6) Other complications

- Prone positioning can increase the risk of heart and lung complications, particularly in those who already have severe breathing or heart problems.
- It is difficult to know how each individual will respond to being positioned.
- Rarely, we may have to cancel or postpone your procedure.

If you experience problems after your operation

If you notice any problems after your operation speak to your surgical team or anaesthetist in the first instance. You may need to be referred for other investigations or to another specialist, depending on the problem. If you have already been sent home please contact your GP or the contact details given on discharge.

For More Information

Your surgeon and anaesthetist will meet with you to discuss the procedure and risks involved, usually on the day of surgery. For more information relating to anaesthetic risk, see below.

Eye Damage: https://tinyurl.com/daujp8as
Nerve Damage: https://tinyurl.com/2x3ddu6p

Or you can scan the following QR codes:

Dr Geoffrey Warnock
Dr Urmila Ratnasabapathy
Dr Simon Young

Adapted from the Neuroanaesthesia and Critical Care Society Patient Information Documents – This should not substitute informed risk discussion and consent, rather provide an organisational framework on which to base these discussions.