

Body Mass Index (BMI) is the relationship between your height and weight and is expressed as a number.

BMI is used to determine whether a person is a healthy weight for their height. The ideal range for BMI is from 20 to 25. A BMI over 25 is termed as being overweight and over 30 is termed as being obese.

There can be a higher risk of surgical and anaesthetic complications if you have a BMI over 30. If you lose even 5 to 10% of your weight, this could reduce some of the risks associated with anaesthesia. Please ask your GP for advice on safe weight loss programmes. If you are over a certain BMI or have particular health problems your GP may be able to refer you to a free exercise programme.

The John Radcliffe hospital has its own drop-in Health Improvement Advice Centre called '**Here for Health**'. We can provide advice and support on healthy living, including physical activity, diet, smoking, alcohol and emotional wellbeing.

The Centre is in the Blue Outpatients area, on Level 2 of the main John Radcliffe hospital.

Tel: **01865 221 429**

(Monday to Friday, 9.00am to 5.00pm)

Email: hereforhealth@ouh.nhs.uk

Website: www.ouh.nhs.uk/HereforHealth

What are the risks?

The complications that can occur during surgery are:

- **Deep vein thrombosis (DVT) or blood clots in your veins**

During your operation and recovery afterwards you will not be as active as you may be normally. This means that the leg muscle movement which usually massages the blood from your legs back to your heart will not be working. This can lead to blood clots forming in your legs. This may cause serious problems if the clots or part of the clots break away and move

to your lungs. The risk of this happening is greater if your BMI is higher. The staff will give you some anti-embolism stockings and injections of a drug called dalteparin to try and prevent this, but it is still a risk that you need to know about.

- **Breathing problems**

If you need to have a general anaesthetic for your surgery (which makes you go to sleep), then the anaesthetist will have to place a breathing tube in your trachea (windpipe) to help you to breathe when you are under the anaesthetic. This may become difficult due to the extra tissue around your neck. Your lungs can also get squashed due to excess tissue. This may cause a problem with the breathing machine being able to push enough oxygen into your lungs. Excess tissue may also contribute to the problem of “sleep apnoea”, where you stop breathing during your sleep. This may make it difficult for us to get air into your lungs after the surgery, when you are waking up from the anaesthetic.

- **Low oxygen levels**

If you have a high BMI your heart has to work harder to pump blood around your body. Your body uses up oxygen more rapidly because of this. As your body already has lower oxygen reserves, when you are given the general anaesthetic the oxygen is used up more quickly. This means that your oxygen levels are likely to drop lower than a person who is not overweight, which can be harmful to you.

- **Complications with pain relief**

It may take longer, be more uncomfortable and may be more difficult for the anaesthetist to carry out certain procedures, such as finding a vein to place the cannula (thin tube) for a general anaesthetic, or carrying out another anaesthetic technique such as an epidural, spinal or nerve block.

- **Recovery after a general anaesthetic**

If you have a BMI over 30 it is likely that you will take longer to come round and recover from a general anaesthetic. This means you may need to spend longer in hospital.

An audit of NHS patients called 'NAP 4 and 5', carried out by the Royal College of Anaesthetists in 2011 and 2014 showed that in patients with a high BMI, there was an increased risk of complications during general anaesthesia.

The anaesthetist will discuss with you the different choices of anaesthetics available to you for your type of surgery. They will give you advice about the best and lowest risk anaesthetic technique for you. The safest anaesthetic technique may be a local anaesthetic, a spinal block or epidural, rather than a general anaesthetic.

Anaesthetists are trained to look after patients with a higher than normal BMI, however they will need to carry out assessments with you and make plans before the operation to minimise any risks. Despite taking these extra measures, the risk of complications will still be higher.

We hope you will find this information sheet to be informative and helpful to read. We hope it helps you to make an informed choice about your operation and the type of anaesthesia to be used. If you have any concerns or questions please speak to your Pre-operative Assessment Nurse on the telephone number that they will give you during your visit, (usually available from 9:00am to 5:00pm, Monday to Friday). Alternatively, for general information, please telephone the John Radcliffe Hospital Pre-operative Assessment Department.

Tel: 01864 220 640

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

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