



Obstructive sleep apnoea (OSA) and surgery

This leaflet is for patients who have known obstructive sleep apnoea (OSA) and are having an operation.

What is OSA?

OSA is a condition that causes people to stop breathing (apnoea) while they sleep due to an obstruction of the airway, caused when the soft tissue in the back of the throat relaxes. This causes a drop in oxygen levels that result in the person rousing from sleep, which in turn leads to frequent awakenings. This can lead to excessive daytime sleepiness.

OSA is one of the conditions that can be dangerous for driving, and if you have had a recent diagnosis of OSA, you must inform the DVLA. Visit <https://www.gov.uk/excessive-sleepiness-and-driving>.

When a person with OSA has a general anaesthetic or sedation the frequency of the apnoeas can increase. This leaflet explains a little more about the risks of OSA and a general anaesthetic and how they can be managed.

Treatment of OSA

OSA can be treated with a CPAP (continuous positive airflow pressure) machine, which is a machine connected to a face mask that fits either over the nose and mouth, or just over the nose. The machine puffs air into your lungs very gently and this in turn help keep the airway open and prevents obstruction occurring.

There are other ways of managing OSA and these include trying to lose weight, avoiding excess alcohol, stopping smoking and the use of a jaw appliance.

OSA and anaesthetics

It is known that general anaesthetics increase the frequency and possibly the severity of apnoeas as the anaesthetic drugs wear off. It also occurs because there is sometimes some discomfort and loss of deep sleep in the first few nights after an operation. Your body needs to catch up on this deep sleep and it is in the deep sleep that apnoeas occur. This tends to be most noticed on Day 1 and Day 4-5 after your operation.

There are also some painkillers that can make OSA temporarily worse, such as morphine and other related drugs.

In addition, it does depend on what type of surgery is being done. Major surgery or surgery on your nose / mouth / throat, puts you at higher risk of experiencing worsening apnoeas than having minor surgery on, for example, your leg.

Those people who have untreated OSA are more at risk of developing other problems as a result. This can affect your daily life as well as the chance of having complications after your operation.

These complications include heart problems and breathing problems, amongst others. These are improved to a great degree by having treatment for the OSA, for a period of at least 2 to 4 weeks. For this reason, if you have had a new diagnosis of moderate to severe OSA, any non-urgent surgery may be delayed. You will be referred to the Sleep Clinic, and once seen, we often ask that you use your CPAP machine for 2-4 weeks before we rebook your surgery. We do a blood test which tells us how long you need to be treated for.

What can be done to prevent this?

The most important thing is to ensure that you bring your continuous positive airway pressure (CPAP) machine with you to hospital. It is effective at preventing apnoeas and your own machine will be most familiar and comfortable for you. You will then need to ensure you continue to use it when you get home.

Are there other anaesthetic options?

Your anaesthetist may discuss an alternative to general anaesthetic with you. Some operations can be done under local anaesthetic or under regional block, which numbs the part of the body being operated on. This can avoid the need for a general anaesthetic which reduces the risks from the OSA. If you feel nervous about staying awake, you can be given some light sedation although any sedation can increase the risk of apnoeas. A regional block or avoiding morphine-type pain relief can also lead to lessening of complications but these options can be discussed with your anaesthetist beforehand.

How long do I stay in?

Patients with OSA can have surgery as a day case, but if it is expected that morphine or similar drugs will be used, or if the surgery is airway related, you may be offered an overnight stay. Some patients having major surgery may stay in the Post-Anaesthetic Care Unit, or rarely, Intensive Care Unit after the operation, for a period of observation.

Further questions

If you have further questions, please contact the Sleep Clinic on 0118 322 7954 or Pre-operative Assessment on 0118 902 8168 or 0118 902 8025.

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

RBFT Anaesthetics/ Preoperative Assessment Clinic, July 2024.

Next review due: July 2026.