

Anaesthetic Department

Obstructive Sleep Apnoea (OSA) (Suspected or diagnosed)

You have been given this leaflet by our pre-assessment service because, either you have a known diagnosis of obstructive sleep apnoea (OSA) or you have been identified as high risk for having the condition at pre-assessment.

What is obstructive sleep apnoea?

Obstructive sleep apnoea (OSA) is a relatively common condition in which the soft tissues and muscles in the throat relax during sleep resulting in heavy snoring and intermittent episodes of total blockage of the airway. These episodes are called apnoeas and cause the sufferer to momentarily wake up. This pattern of sleeping and waking results in the sufferer not getting enough sleep, leading to problems such as daytime sleepiness and irritability.

Patients are often unaware that they have the condition but may be aware that they are a heavy snorer. Often symptoms are apparent to a partner or family member and include loud snoring, noisy and laboured breathing, repeated short periods where breathing is interrupted by gasping or snorting, and depression and extreme mood swings.

Whilst there are some medical conditions that cause obstructive sleep apnoea, for example nasal polyps or having enlarged tonsils, most cases are related to lifestyle factors, especially being overweight.

Without treatment, OSA can lead on to other health problems including high blood pressure, stroke, type 2 diabetes and heart disease, and increase your chance of having a serious accident from being excessively tired.

What is the relevance of OSA to you having surgery?

Having OSA may put you at increased risk during and after your anaesthetic and surgery. This is especially important if you are having major surgery or are not in good general health. Complications are still quite rare, but include low oxygen levels post operatively, respiratory failure, cardiac events, and unplanned admission to intensive care. It is, therefore, important for us to consider the potential impact on your surgery and take steps to minimise any potential risks to your health.

If the results of our screening questionnaire indicate that you are at risk of suffering from OSA, it is likely that we will send you for formal testing, and if it is confirmed, refer you on for treatment. This will result in your surgery being delayed whilst this process occurs.

What is a sleep study?

To formally investigate OSA, you will need to undergo a sleep study. This is often done in your own home, and you will need to wear some monitoring equipment whilst you sleep that checks your breathing pattern and oxygen levels overnight. We provide a service from Dorset County Hospital to perform sleep studies and we will endeavour to process test results as quickly as possible.

What if I do have obstructive sleep apnoea (OSA)?

Generally, obstructive sleep apnoea is classified into mild, moderate and severe categories depending on how frequent episodes of obstructive breathing take place during sleep. If you are found to have moderate or severe OSA, we would aim to refer you for treatment before surgery, because we feel that this condition, if left untreated, might put you at increased risk at the time of your surgery.

Treatment is often a combination of lifestyle changes and continuous positive airway pressure (CPAP).

A CPAP machine gently pumps air into a mask that you wear over your mouth or nose whilst you sleep. This extra air helps to splint open your airway, preventing excessive snoring and obstructive episodes, enabling you to have a better night's sleep.

We now have a CPAP service based at Dorset County Hospital and will refer you to see them if this is felt necessary. We would normally aim for at least 4 weeks of CPAP therapy before undertaking your surgery when the risks from OSA are thought to have reduced to that of somebody not suffering from the condition.

If you are found to have mild OSA we are generally happy to proceed with your surgery with caution. Treatment is largely with modification of your lifestyle unless the condition is affecting your quality of life, in which case CPAP treatment may be needed.

If your surgery is urgent, it is unlikely that there will be time to investigate you for the condition. In this instance we will carry on with your surgery but take steps to minimise your risk.

Driving

Because obstructive sleep apnoea can be associated with excessive daytime sleepiness it has implications for driving.

If you have a diagnosis of moderate or severe obstructive sleep apnoea and are suffering with excessive daytime sleepiness you should NOT be driving, and it is your responsibility to inform the DVLA. Please read the DVLA guidance: www.gov.uk/excessive-sleepiness-and-driving

If you have a CPAP (continuous positive airway pressure) machine for your OSA

If you have been given a CPAP machine for treatment of OSA in the past, we would advise that you wear it regularly between now and your surgery date.

Make sure you bring your CPAP machine with you to the hospital on the day of surgery. We will be expecting you to wear it every time you go for a sleep whilst in hospital.

Your anaesthetic

Your anaesthetist on the day of surgery will regard your overall safety as their top priority. If you are at risk of OSA or do indeed have the condition, your anaesthetic will be tailored to make it as safe as possible for you.

Generally, we would aim to minimise the amount of long acting, strong pain killers (especially opiates) that you need after your operation because they can lead to drowsiness and affect your breathing after your operation. We will still be mindful of pain related to your operation and may use different medications and pain-relieving techniques to combat it.

For some operations it may be possible to avoid a general anaesthetic altogether and instead opt for what is known as a regional anaesthetic. This might involve having a quick acting epidural (spinal anaesthetic) or a nerve block and you being awake for surgery.

If you do need to be asleep, we can also adopt these same regional anaesthetic techniques to make your procedure as pain free as possible and minimise your need for strong painkillers.

The Royal College of Anaesthetists has some excellent online leaflets about spinal anaesthetics, nerve blocks and anaesthesia and your weight which would be worth having a look at prior to your surgery: www.rcoa.ac.uk/patients/patient-information-resources

Sometimes it is necessary for you to be monitored in the high dependency unit after your operation, especially if you are having a major operation or your overall health is not good.

General advice for all patients

Whatever your situation, it would be worthwhile adopting some simple measures to make your sleep as safe as possible around the time of your operation:

- Avoid sleeping flat on your back after your surgery. It is better to sleep propped up, and/or on your side, as you are less likely to snore and less likely to experience obstructive episodes with your breathing.
- Try and refrain from drinking alcohol before and after your surgery. Alcohol is a depressant drug and causes deeper sleep and increased snoring which might make obstructive sleep apnoea worse. We recommend trying to stop at least 4 weeks before your surgery date.
- Refrain from using sedative medications a week either side of your surgery. Just like alcohol, sedative medications will have the same effect on sleep, snoring and obstructive sleep apnoea.
- If you are overweight, it would be beneficial to try to lose weight prior to surgery. We
 recognise that this is not easy, so it might be best to get some advice from your GP
 practice or get in contact with LiveWell Dorset (<u>www.livewelldorset.co.uk</u> or phone
 0800 840 1628) to get some support with this.

• If you smoke or vape, try to cut down or even better, stop altogether. We recommend that you try to stop for at least 6 weeks prior to your surgery.

Where can I get more information?

There is lots of information online about OSA. Please see the useful websites below for further information about the condition and how it relates to anaesthesia:

www.nhs.uk/conditions/sleep-apnoea

www.sleep-apnoea-trust.org

www.asthmaandlung.org.uk/conditions/obstructive-sleep-apnoea-osa

www.rcoa.ac.uk/pateints/patient-information-resources

We hope you have found the above information useful, but if you have any further questions or need more advice or information, please book an appointment with your general practitioner.

About this leaflet:

Author:	Dr Richard Lowe, Consultant Anaesthetist
Written:	September 2023
Approved:	November 2023
Review Date:	November 2026
Edition:	v1

If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email pals@dchft.nhs.uk

