DOWN'S SYNDROME ASSOCIATION

DSMG UK & IRELAND The Down Syndrome Medical Interest Group

Obstructive Sleep Apnoea

October 2026



A Down's Syndrome Association publication

Introduction

Sleep apnoea is a condition where people stop breathing while they are asleep. The most common type is Obstructive Sleep Apnoea (OSA) and this occurs when the upper airway at the back of the throat becomes blocked repeatedly during sleep.

Each time this occurs, breathing stops for a time and the person is woken up by the struggle to breathe

These interruptions in breathing ('apnoeas') may occur many times during the night (or during daytime naps) causing disruption and poor-quality sleep.

It is the frequency of these events which determines the severity and whether treatment is necessary.

OSA and Down Syndrome

OSA can occur in people of any age. It is thought that 2-3% of people in the general population have some degree of Obstructive Sleep Apnoea. It is likely that there are many people with undiagnosed OSA.

OSA is much more common in people who have Down syndrome and between 50% and 80% of children who have Down syndrome are thought to have it.

This is due to various physical characteristics associated with the condition, including:

- floppy muscles in the throat
- enlarged tonsils and adenoids
- a smaller upper airway.

There are also several health conditions that are more common in people who have Down syndrome that contribute to sleep apnoea;

- obesity
- hypothyroidism
- gastroesophageal reflux disease
- nasal congestion.



What are the Signs of OSA?

- **Loud snoring.**
- **Coughing/choking noises.**
- **Restless sleep.**
- **Sleeping with the head tipped back.**
- **Unusual sleeping positions.**
- **Repeatedly interrupted breathing.**
- **Excessive sweating.**
- **Possibly bedwetting (children).**

Adults might present for the first time with OSA if they have gained weight, developed other health problems which make the OSA worse or more noticeable, or if it just hasn't been noticed as a child.

There may also be signs during the daytime that a person has OSA such as:

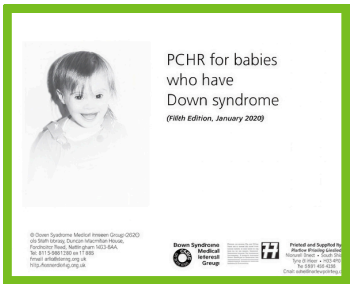
- excessive sleepiness
- behaviour changes
- impaired concentration
- poor memory.

Diagnosing Obstructive Sleep Apnoea



The interruptions in breathing cause a drop in oxygen levels.

Therefore it is recommended that all children who have Down syndrome have their oxygen levels checked overnight, whilst asleep, at around the age of six months and then once a year until the age of five.

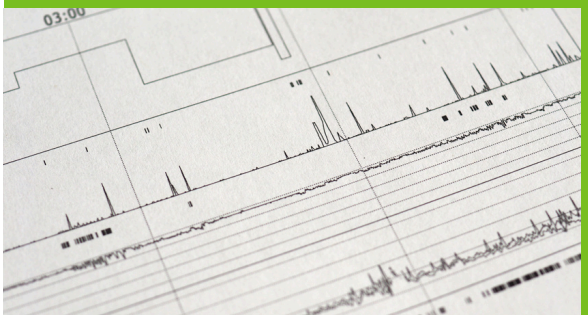


It is an easy procedure which can be done at home and is called an Overnight Oximetry.

A soft probe is taped on the finger or the foot.

This is to ensure that their breathing pattern and oxygen levels are normal.





If OSA is suspected, then a clinician will arrange for a sleep study to take place.

This is called a polysomnography and involves sensors being placed on the body to give a detailed picture of what happens while you sleep.

The test will monitor:

- brain waves
- eye movements
- blood oxygen levels
- heart rate and rhythm
- breathing patterns and airflow
- snoring
- body movements
- sleeping position.

A sleep study will usually involve an overnight stay in hospital.

Treatment for OSA

For some children removing adenoids and tonsils will sort the issue; this is less likely to be effective in adults.

Many children and adults will need a machine called 'CPAP' (Continuous Positive Airway Pressure).

It blows air into the person's nose and/or mouth and helps them to breathe. CPAP involves wearing a mask through the night while asleep.

The mask is attached to a tube which is attached to the machine.

Many people find wearing the mask is uncomfortable and parents report it to be difficult to get their child to use CPAP.

We have another resource, a step-by-step guide on how to introduce the mask and machine, on our website.

It is very important to go very slowly and to get help if needed.



Other Treatments

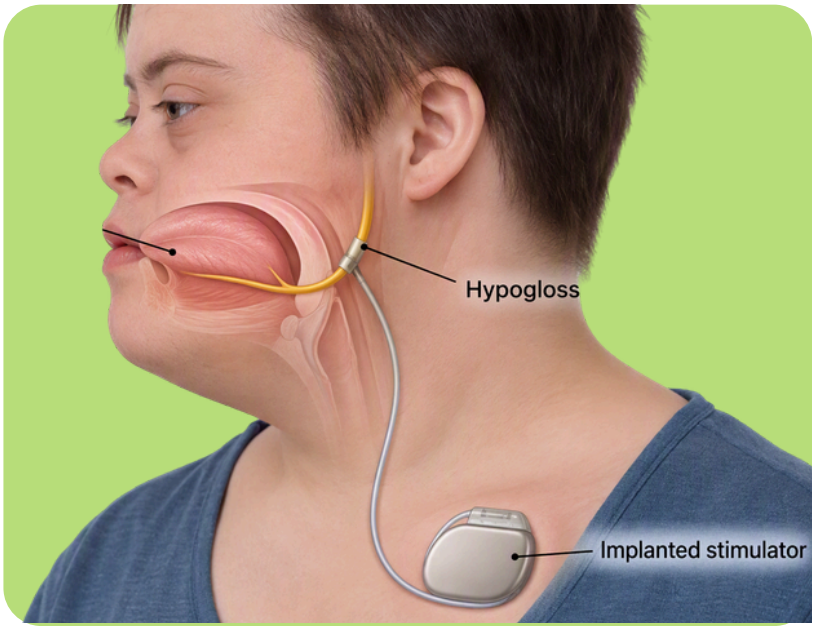
Hypoglossal Nerve Stimulation

This is not widely available but is an alternative treatment for OSA for people who cannot tolerate CPAP.

It involves a surgical procedure where a device is implanted under the skin in the chest with a lead that goes under the chin.

It works by sending gentle electrical pulses to the hypoglossal nerve, which controls the muscles of the tongue.

By stimulating this nerve, the device helps to keep the airway open during sleep, reducing the risk of airway obstruction that can lead to breathing interruptions.



Oral Appliances

These are custom-made and are designed to either push the lower jaw and tongue forward or keep the tongue in place and keep the airway open.

Weight Loss

For some people losing weight can improve sleep apnoea.

Nasal Congestion

Where this is a contributing factor using saline drops, nasal steroids, and/or decongestants can reduce the congestion and the resulting narrowing of the airway.

References and Resources

Sleep Apnoea - NHS

Sleep Apnoea in People with Down Syndrome - Adult Down Syndrome Center

Sleep Disordered Breathing - DSMIG

Sleep Apnoea Trust - A Patient Supported Charity

Down's Syndrome Association's CPAP Resource

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