Velopharyngeal dysfunction

This leaflet explains more about velopharyngeal dysfunction in adult patients. If you have any further questions, please speak to the speech and language therapist or doctor caring for you.

What is velopharyngeal dysfunction (VPD) and why have I got it?

VPD is a speech difficulty that occurs when the soft palate muscle at the back of the roof of the mouth does not close tightly against the back wall of the throat during speech. This causes air to escape through the nose instead of the mouth.

The likely causes are one of the following:

- a cleft palate has been repaired and the muscles are still not working correctly or the palate remains too short. A cleft palate is when a baby’s mouth and palate have not fused properly during pregnancy
- the soft palate has a ‘hidden’ or submucous cleft palate
- the soft palate has no cleft (gap) in it but seems too short for the space between it and the back wall of the throat
- the soft palate looks long enough but has too large or deep a throat to reach across
- the soft palate does not move or stretch normally. This is often caused by nerve messages not getting through properly or maybe for an unknown reason.

What are the signs and symptoms?

Your speech could show one or more of the following characteristics:

- hypernasal speech (too much air vibrating in the nose)
- the sound of air escaping down the nose while speaking (called nasal emission or nasal turbulence)
- speech sounds may be weak, missed out or replaced with other sounds that may be easier for you to make, for example ‘baby’ becomes ‘mayme’.

Do I need any tests to confirm the diagnosis?

You will have a speech assessment by a specialist speech and language therapist that will identify signs of VPD in your speech. During this assessment, the speech and language therapist will talk to you and listen to your speech. They will also ask you to count and repeat some sentences in order to hear and analyse your speech. This assessment is generally video recorded in order to have a record of your speech for future comparison. The results of this assessment will be discussed with you.

If the speech and language therapist feels that there are signs of VPD and you wish to proceed with possible surgical treatment, they may recommend that you come to a velopharyngeal investigation (VPI) clinic. The VPI clinic involves a detailed speech assessment and video recording, as well as a moving X-ray showing how the palate is working while you are talking. This type of X-ray is called a lateral video fluoroscopy.
Another test may also be carried out called a nasendoscopy. This is where a very small light with a camera on the end is inserted through the nose to look at the palate moving from a different angle. This is only carried out if we need more information about the palate.

**What treatments are available?**
You and the speech and language therapist will discuss the results of these assessments with the cleft surgeon to decide the appropriate treatment. This will quite often be an operation on the palate to make speech sound clearer. If surgery to the palate is needed, the speech and language therapist will review your speech after the operation to check on progress/change, and may carry out some speech therapy.

There are two main types of operation and the surgeon will choose the one that has the greatest chance of success once they have all the information. One type of operation tries to make the palate longer and more stretchy to close up against the back wall of the throat. This is called a palate re-repair. The other type of operation moves muscles around in the throat to narrow the space and reduce the air leaking into the nose. This is called a pharyngoplasty. You will receive more information about any possible operation that you may need at the VPI clinic.

**What should the operation do?**
We hope the operation will reduce the hypernasal tone of your speech and stop any nasal emission if it is present. Speech sounds are often stronger after the operation.

However, speech is a very complex skill that most of us develop without thinking about it. When VPD occurs, the speech may not only be very nasal sounding, but the sounds that we use in our words may also be produced in the wrong part of the mouth. The operation will not change this feature on its own and you may need speech and language therapy with home practice to teach new speech patterns. It may be more challenging for an adult to make permanent changes to the way you pronounce sounds. We will discuss this with you individually at your appointment.

**How soon will I notice a difference in my speech after the operation?**
You may notice a difference in your speech straight away, but often it can take a while for the muscles in the palate to 'learn' how to work in their new position.

**What happens if I do not get treatment?**
The symptoms of VPD – hypernasality, or air coming down the nose when you speak, or some mispronunciations – are unlikely to change if treatment is not given.
Useful sources of information

The Cleft Lip and Palate Association (CLAPA) is a registered charity and support group for families and patients with cleft lip and/or palate.  

w: www.clapa.com

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.  

t: 020 7188 8748, Monday to Friday, 9am to 5pm

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.  

t: 020 7188 8801 (PALS)  
e: pals@gstt.nhs.uk  
t: 020 7188 3514 (complaints)  
e: complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch.  

t: 020 7188 8815  
e: languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.  

t: 111

NHS website

Online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing.  

w: www.nhs.uk

Get involved and have your say: become a member of the Trust

Members of Guy’s and St Thomas’ NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, please get in touch.  

t: 0800 731 0319  
e: members@gstt.nhs.uk  
w: www.guysandstthomas.nhs.uk/membership

Was this leaflet useful?

We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form,  
w: www.guysandstthomas.nhs.uk/leaflets, or  
e: patientinformationteam@gstt.nhs.uk