



Velopharyngeal Insufficiency/Speech Management Surgery

What is Velopharyngeal Insufficiency?

Velopharyngeal Insufficiency (VPI) occurs when the back end of the roof of the mouth (soft palate), and the back of the throat (pharynx) don't work together to make a good seal when your child is talking. This is often the result of the soft palate being too short, or the muscles of the palate not working well. Air leaks through the nose and gives the speech a nasal quality. It is often hard to understand a child with VPI, and the child has to work very hard to speak and be understood.

How is VPI diagnosed?

An evaluation with a Speech Language Pathologist is necessary. It is also important to be evaluated by a physician trained to diagnose VPI. This is usually done by a Cleft or Craniofacial Surgeon, a Plastic Surgeon, or an Ears, Nose and Throat Surgeon. It may also be necessary to take a good look at the nose, the palate, the throat, and the vocal cords. Sometimes this is done with a very small camera that is put through one side of the nose. The doctor and Speech Language Pathologist usually do this together to find out if your child has VPI.

What if my child needs surgery?

If it is determined that your child has VPI and needs surgery, different options are discussed with the patient/family/caregivers. There are three main surgeries that are done to manage VPI. The best surgery for your child depends on the size and nature of the opening. Each of these surgeries is done to lower the amount of air escaping from the mouth into the nose.

1. **Furlow Palatoplasty:** This surgery is a type of Z-plasty repair of the soft palate. The muscles of the palate are realigned and the palate is lengthened by using the Z-plasty technique.
2. **Pharyngeal Flap:** Tissue from the back of the throat is attached to the soft palate making a physical barrier in the back of the throat. This surgery is done when there is good movement in the side walls of the throat. The size of the flap is determined by the size of the opening as well as the side wall movement.
3. **Sphincter Pharyngoplasty:** Muscles are attached from the side of the throat to the back of the throat. This surgery is usually done when there is good movement of the palate. The size of the muscle flaps used are again determined by the size of the opening.

What should we expect after the surgery?

- Your child will spend at least one night in the hospital after the surgery.
- Your child will usually be sore for 24-48 hours. The surgeon will prescribe pain medicine for the pain.
- Your child will have stitches that will dissolve on their own.
- Your child may snore more loudly at first, but this usually gets better once the swelling in the back of the throat goes down.



IN CARE OF KIDS

- You may or may not notice an improvement in speech right away.
- Your child may complain of neck pain or stiffness for the first few days.

Diet:

- Your child will have an IV in the hospital.
- Your child will be on a pourable liquid diet until his/her surgeon says they can change to a soft diet.
- Your child can't use straws or silverware until his/her surgeon says it is okay to use them.

Activity:

- Your child shouldn't go back to school until they don't need pain medicine.
- Your child shouldn't go back to gym class for 3 weeks after surgery.

Follow-up:

- Your child will follow-up with their surgeon __ weeks after surgery.
- Your child will return to speech therapy __ weeks after surgery.
- Your child may also follow-up in VPI Clinic six months after surgery.

ALERT: Call your child's Surgeon, Primary Care Provider, or nurse if you have any questions or concerns, or if your child:

- Is having trouble breathing. If this is a medical emergency call 911!
- Is having trouble sleeping.
- Is having severe pain that will not go away.
- Has more than a teaspoon of bleeding from the nose or the mouth.
- Has vomiting that will not stop.
- Has a fever over 101.5F.
- Is not drinking enough fluids.
- Has special health care needs not covered by this information.

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Approved by the Patient Education Committee
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