Sphincter Pharyngoplasty Surgery

Sphincter pharyngoplasty (SFINK-ter far-INGO-plasty) is a surgery done to help correct velopharyngeal dysfunction (VEE-lo-fa-RIN-jee-uhl dis-FUNK-shuhn), or VPD.

VPD occurs when the soft palate cannot properly separate the back of the mouth from the nose during speech. Children and adults with VPD often have nasal-sounding speech, with abnormal air leakage through the nose as they talk.

Diagnosis

VPD may be caused by a relatively short soft palate, poor palate function, or both. Risk factors for VPD include cleft palate, submucous cleft palate, 22q11.2 deletion syndrome and other genetic conditions. In some cases, VPD may occur after adenoid removal.

If VPD is suspected, your child’s surgeon and speech-language specialist may do special tests to confirm that VPD is present. Once a decision is made to proceed with surgery to correct VPD, your child may have more testing done, such as an MRI, sleep study or other evaluations.

Treatment

Your child’s speech-language specialist and surgeon will talk to you about treatment options for your child. Surgery is usually recommended to treat VPD. Sphincter pharyngoplasty is one type of surgery that may be done. Many children will also need speech therapy to address any speech, language or other communication difficulties.

Surgery

During your child’s surgery, flaps of tissue from behind each of the tonsils are raised and attached across the back of the throat. This narrows the space behind the palate in order to help the velopharyngeal valve close and to prevent air from leaking through the nose when they are talking.

Picture 1  Design of the incisions
The procedure is done in the operating room with your child under general anesthesia. It takes about 1 to 2 hours. The stitches placed during surgery will dissolve on their own.

**After surgery**

After your child has surgery, they will be admitted to the hospital for at least one night for hydration, pain control, and airway monitoring. Some children are admitted to the PICU for closer monitoring.

- Your child will be on a liquid diet right after surgery and then will advance to a soft diet for 3 weeks.
- Your child will go home with antibiotics to take for the first few days.
- It may sound as though your child’s nose is stuffy, as if they have a cold (hyponasal). This is normal and usually goes away as swelling goes down over a period of a few weeks to a few months.
- Snoring is very common after surgery due to swelling and secretions. Although the snoring usually improves as swelling goes down, some children will snore long-term.
- It is important to monitor your child’s sleep to ensure they do not have pauses in breathing and do not appear to be gasping for air.
- Throat and neck pain are common after surgery, lasting a few days. You will receive instructions for pain management for your child before going home from the hospital.
- Most children will need to have a special test called a sleep study (polysomnogram) about six months after surgery. This test is to look for any pauses in breathing during sleep (sleep apnea).

**What to do and watch for at home**

Please call the Cleft-Craniofacial/Plastic Surgery clinic right away if your child:

- Is not eating or drinking
- Is bleeding or has drainage from the mouth
• Has a fever over 101 degrees F
• Is gasping for air while sleeping or has pauses in breathing while sleeping

Activity and diet

Your child will be on a soft diet for 3 weeks. Soft foods include yogurt, mashed potatoes, applesauce, pudding, Jell-O®, mashed fruits and vegetables or other food that has been mashed or blended. Please see pages 4 and 5 for a list of foods allowed after surgery.

Your child should not drink from straws, or eat suckers, popsicles or anything that has a stick that could poke the back of the throat.

Your child will need to be supervised for 3 weeks during teeth brushing. Your child should not place the toothbrush too far back in the throat near incisions.

Please follow the Feeding Guidelines after VPD Surgery chart on Pages 4 and 5.

Follow-up

• Your child will see the surgeon for a post-operative check 2 to 3 weeks after surgery. This is to ensure everything is healing well after discharge from the hospital.

• Your child will also have a post-operative speech evaluation with the team speech-language specialist about 6 months after surgery.

• If your child was getting speech therapy prior to PPF surgery, they can typically resume these services about 3 weeks after surgery. Please check with your child’s surgeon to verify when your child can resume these services.

If you have questions before the appointment, please contact the Craniofacial/Plastic Surgery clinic Monday through Friday from 8 AM to 4:30 PM at 614-722-6449. For any urgent concerns during evenings, weekends or holidays, please call (614) 722-2000 and ask to speak with the plastic surgeon on call.
## Feeding Guidelines after VPD Surgery

<table>
<thead>
<tr>
<th>Food Groups</th>
<th>Foods Allowed</th>
<th>Foods to Avoid</th>
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</thead>
</table>
| **Meats and Other Protein** | Deli meats (thin deli slices)  
Broiled fish  
Peanut butter  
Cottage cheese  
Soft cheeses  
Yogurt  
Eggs  
Hummus  
Tofu  
Sloppy joe meat | Hard cheeses  
Bacon  
Nuts or seeds  
Steak  
Chicken breast/nuggets  
Meatballs  
Hamburger  
Hot dog |
| **Breads**             | Bread (without nuts, fruits or seeds)  
Pancakes  
Donuts  
Waffles  
French toast  
Muffin (without nuts or fruits) | Hard or crunchy breads  
Breads with nuts or seeds  
English muffins  
Bagels |
| **Cereals**            | Cream of wheat  
Cream of rice  
Farina  
Oatmeal  
Grits | Hard or crunchy cereals  
"Cold" cereals (Cheerios) |
| **Fruits**             | Canned or well-cooked fruit  
Well-ripened bananas  
Smooth applesauce | Hard or crunchy fruit  
Fruits with seeds or skin (berries, kiwis, grapes, etc.) |
| **Vegetables**         | Canned or well-cooked vegetables | Hard or crunchy vegetables  
Vegetables with seeds, pulp or skins (like tomatoes, green beans, peas, or corn) |
| **Potatoes and Starches** | Mashed white or sweet potatoes  
Well-cooked noodles (pasta, mac & cheese) | Hard or crunchy toppings on potatoes or noodles  
Sauces with chunks  
Rice  
Whole grains such as barley, quinoa, kasha, buckwheat |
<table>
<thead>
<tr>
<th>Desserts</th>
<th>Milkshakes</th>
<th>Ice cream or frozen yogurt without toppings</th>
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</thead>
<tbody>
<tr>
<td>Pudding</td>
<td></td>
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<tr>
<td>JELL-O®</td>
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<tr>
<td>Any of the listed desserts with pieces of</td>
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<tr>
<td>fruit, nuts, seeds or hard toppings</td>
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<tr>
<td>Popsicles with sticks</td>
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<thead>
<tr>
<th>Miscellaneous</th>
<th>Chips</th>
<th>Pretzels</th>
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<tbody>
<tr>
<td>Uncrustables®</td>
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<tr>
<td>SpaghettiOs®</td>
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<tr>
<td>Fruit snacks</td>
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<tr>
<td>Crackers (Goldfish®)</td>
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<tr>
<td>Granola bars</td>
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