What is esophageal manometry?

Esophageal manometry is a diagnostic test of the nerves and muscles in the esophagus (feeding pipe). The test uses a thin flexible plastic catheter (tube) inserted through the nostril, into the esophagus, and ending in the stomach. Sensors on the catheter measure how the muscles of the esophagus squeeze and relax, and the information is recorded to a computer.

Why might a child need esophageal manometry?

The test may be performed in children who have difficulty swallowing, painful swallowing, or chest pain to determine if problems with muscles of the esophagus are related to the symptoms. It may also be performed when specific disorders are known or suspected (for example, achalasia or systemic sclerosis), or to evaluate a child before or after surgery for esophageal diseases. Other tests such as upper endoscopy or contrast esophagram (x-ray) may be performed prior to esophageal manometry.

How is esophageal manometry performed?

No specific preparation is needed before esophageal manometry, although the child will be asked to refrain from eating 4 or more hours prior. The thin flexible plastic catheter will be placed while your child is awake with the use of numbing medicine (spray or gel) in the nostril. A small amount of gagging and discomfort is normal during insertion of the catheter. Alternately, the catheter can be placed while asleep if your child is undergoing another procedure that requires anesthesia. The test is typically performed with a series of swallows that may include thin liquids (such as water, Gatorade™), thick liquids (applesauce), and solids (such as bread, marshmallows, or specific foods your child has difficulty swallowing). A technician, nurse, or doctor will guide the child through the different swallows and the test is typically complete in 45-60 minutes.
What happens after esophageal manometry?

The catheter is removed immediately after completion of the test. Children typically are discharged home and can resume their normal activity. Dietary or other recommendations may be made on the basis of manometry results. The doctor may discuss findings of the esophageal manometry immediately after the study is completed, or may contact you within a few days after reviewing the results.

What are the risks of esophageal manometry?

The esophageal manometry test is very safe. During the test, the child may experience some discomfort or bleeding from the nose, a funny taste in the mouth, or a sensation of gagging or throat discomfort. Usually, these symptoms go away a few minutes after the manometry tube is removed. More serious problems such as an injury through the esophagus or stomach are rare.

What to watch for after the test?

Some children might have discomfort with swallowing or a small amount of bleeding from their nostril several hours after the study is completed. Both of these symptoms should resolve within 24-48 hours. Generally, children feel the same after the test as they felt before.

When to seek medical advice?

Please contact your child’s gastroenterologist if your child has persistent pain, bleeding that does not stop, difficulty breathing, or cannot drink enough liquids to stay well-hydrated.

Please discuss specific instructions about study preparation and discharge with your child’s gastroenterologist.

IMPORTANT REMINDER:

This information from the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) is intended only to provide general information and not as a definitive basis for diagnosis or treatment in any particular case. It is very important that you consult your doctor about your specific condition.

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