

This hand out will introduce you to tests used to evaluate gastroesophageal reflux. Your doctor will help you decide which tests to perform on your child.

Definition:

Gastroesophageal Reflux (GER): GER or Reflux is the medical term used to describe a condition in which stomach contents (food and STOMACH acid) frequently flow back up out of the stomach, and up the esophagus (a "tube" connecting your mouth and your stomach). GER can look different in different children and at different times. Sometimes it may not flow all the way out of the mouth (Like a "wet burp", while at other times, it may be forceful vomiting which empties the stomach.

Common Tests:

Upper GI/Barium swallow: This is a test done in the x-ray department that looks at the child's digestive tract and how food moves through it. The child drinks barium (a white chalky substance that shows up on the x-ray) and is filmed as the barium goes through the digestive tract. Since most children don't have reflux during the test, it helps rule out other problems, such as obstructions, but doesn't actually confirm the diagnosis of reflux.

The pH probe: This is a test done to look at how much acid is in the esophagus (there shouldn't be any). A small probe is placed in the esophagus with the tip just above the stomach. The probe is connected to a recording device which follows the acid levels in the esophagus, and shows A drop in the pH each time reflux episodes occur. Caregivers keep a diary of the child's eating and behavior during the probe test so that a comparison can be made with the probe results.

Scintigraphy, Gastric Emptying Test, or Milk Scan: This test is a series of scans that show how food moves out of the stomach. The child is fed either liquids or solids mixed with a radio-labeled powder (powder mixed with a nuclear element that will show up on the scan) and scanned several times. This study is used primarily if slow stomach emptying is suspected but it also shows reflux episodes and whether the food gets into the lungs.

Endoscopy: During this test (done in the operating room while the child is asleep) a flexible scope (Endoscope) can be used to examine the upper digestive tract and airway. Small pieces of skin from the esophagus, stomach and upper portion of the small intestine can be taken and are examined for signs of irritation or allergy. This procedure also allows the doctor to examine the valves in the intestinal tract and actually watch them open and close. Obstructions and ulcers may also be seen through an endoscope.

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Manometry: Food is moved through the digestive by a series of coordinated muscle contractions that push the food through. This test evaluates the strength and coordination of the contractions of the muscles throughout the digestive tract by placing a catheter with small sensors into the child's esophagus, stomach, and intestines. It is done in children at a few specialized hospitals.

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Resources and references

www.reflux.org

www.iffgd.org

www.refluxinchildren.com

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