

Combined Antroduodenal (AD) & Colonic Manometry: Parent Guide

Antroduodenal and Colon Manometry:

The term “manometry” refers to the measurement of pressure. Antroduodenal (AD) and colonic manometry testing allows your doctor to measure the strength and organization of the squeeze (or contraction) of the antrum (part of the stomach), the first part of the small bowel (duodenum), and the large intestine (colon). The large intestine is the final portion of the body where stool is formed, stored and then exits. Your doctor uses special catheters to do the test. Combined AD and colonic manometry testing requires a three-day hospital stay.

There will be two separate catheters placed. The catheters are long and flexible tubes with sensors that measure the intensity, length and order of contractions in the stomach, small bowel, and large intestine. The catheters will be placed when your child is sedated.

Preparation:

Our Motility Physician likes to meet patients and guardian(s) prior to the test. There will be an appointment completed either in clinic or via telehealth. During the appointment, your child’s medical history will be discussed, and an in-depth explanation of the Manometry Study will be provided.

The motility nurse will email you the instructions in preparation for the study. The instructions include **when and how** to perform a bowel cleanout that is specific to your child. Bowel clean out includes a specified amount of MiraLAX (PEG3350) with juice or Gatorade and administration of Senna or Ex-lax. The patient will also be on a clear liquid diet to assist in evacuating their colon of stool.

A clear liquid diet includes Gatorade, Jell-O, Popsicles, broth, apple juice, ginger ale and water.

The motility nurse will obtain your child’s medical history and medications your child uses. Some medications alter the manometry study, therefore your child’s medication may be weaned or stopped to prepare for an accurate study.

Schedule Overview:

- Day 1
 - Admission, please arrive at 1100 AM
 - **Hospital Address:** 100 Mario Capecchi Dr, Salt Lake City, UT 84113
 - When entering the building you will check in with our reception staff and they will direct you to the Inpatient Admitting Office. It is located on the first floor of the hospital, down the hall (on the right-hand side) from the security/reception desk. After checking in, they will direct you to what unit & room you'll be staying in for the duration of your stay.
 - Continuation of Colon Clean Out
 - Patients are usually admitted to the hospital for a colon clean-out with stool softeners, laxatives and/or rectal irrigations.
 - Patients will only be able to drink clear liquids and will get IV fluids during the clean-out to stay hydrated. If it is difficult for your child to drink the MiraLAX, a

Nasogastric (NG) tube will be temporarily inserted to ease administration of the bowel clean out.

- They will not be able to eat or drink anything for 8 hours prior to the procedure
- Day 2
 - EGD with Colonoscopy and Placement of Manometry Catheters
 - The patient is completely asleep under general anesthesia during the procedure, so they will not have any pain or remember the placement of the catheters.
 - The manometry catheters are placed inside the small bowel and the colon by your doctor using a long, skinny instrument with a camera on the end called an endoscope.
 - After the catheters are in place, one will be secured with tape to their face or G-tube site. The other catheter will be secured to their bottom and inner thigh.
 - After the patient wakes up, they will return to their hospital room, with the catheters in place overnight. This delay allows for the anesthesia to wear off and the function of the colon to return to baseline.
 - As your child fully awakes from anesthesia it is important to assist your child in not pulling out the catheters.
 - They will not be able to eat or drink during this time, but they will stay hydrated by getting fluids through an IV. Your child will **not be able to have anything by mouth** as this can alter the study.
 - They will have to stay in bed and will not be able to move around much. This is to prevent the catheters from coming out. They will remain like this until the manometry study has been completed. Your child will use a bedpan, urinal, or diaper instead of going to the restroom
- Day 3
 - AD & Colonic Manometry Testing and Discharge Home!
 - The next morning, you will have an x-ray to make sure the catheters are still in the right place.
 - If it is, the nurse will come to your room and connect the manometry catheter to a computer and start the test (approx. 8am). The test is around six hours long and has three parts. It measures the squeeze of the digestive tract while at rest, after eating (approx. 10am), and after medication (approx. 12pm, 1230pm & 1pm). You will be instructed when to order a meal or start feeds by the nurse. Otherwise, the patient will just be resting in bed.
 - Once the study is complete, the catheters and tape are removed, and the patient will be discharged.

You may consider bringing your child's favorite toys or games as they will need to remain in bed after the catheter is placed and during the study

Reassure your child that you will be with them during the entire test (except during catheter placement, during which time your child will be sedated)

Parent's Frequently Asked Questions

What is Colonic & Antro-Duodenal (AD) Manometry?

- Colonic & AD manometry measures the pressure or contractions in parts of the stomach, small intestine and large intestine to determine how well they are working

How is the manometry catheter placed?

- A device called a "manometry catheter" is placed in the large intestine through the rectum while another catheter is placed through your child's nose which will extend to the small intestine. Your child is asleep during the placements of both catheters

What will my child feel during the test?

- This test does not cause pain. However, medications may cause nausea, vomiting, & cramping
- Sometimes a small amount of water may leak from your child's bottom during the test
- After the study is complete, we remove the tape holding the catheters in place. Tape removal may be uncomfortable, but removal of the catheters is not painful.
- Irritation may develop in the nose from the catheter

Why can't we do the study on the same day that the manometry catheter is placed?

- We place the manometry catheters, then conduct the colonic & AD manometry study the next day to allow anesthesia to exit the system prior to beginning the study. Anesthesia is used to help your child sleep during the procedure. Anesthesia can affect the results of the study.

Can my child have a sucker, hard candy or a swab after the catheter is placed?

- No, this can cause activity in the large intestine which may affect the study

What if my child is on TPN (Total parental nutrition)?

- Your child will not require TPN while at the hospital. We will provide IV fluids that will keep your child's sugar stable and keep them hydrated. TPN will be started after discharge.

What if my child has a G-Tube or a GJ-Tube?

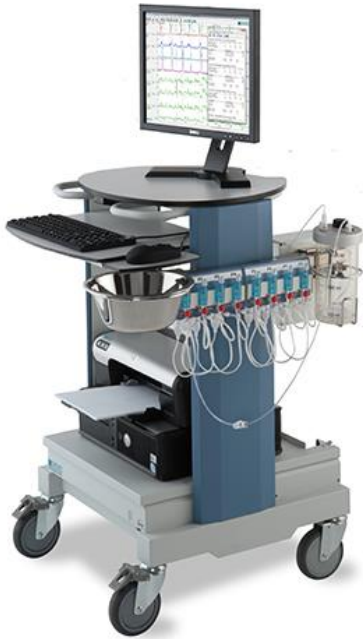
- We may use this port to give medications to assist with clean out. We may also use the site for catheter placement. Please inform the motility nurse that your child has a tube. Motility nurse can coordinate appointment for GJ-Tube replacement.

When will I receive the results of the study?

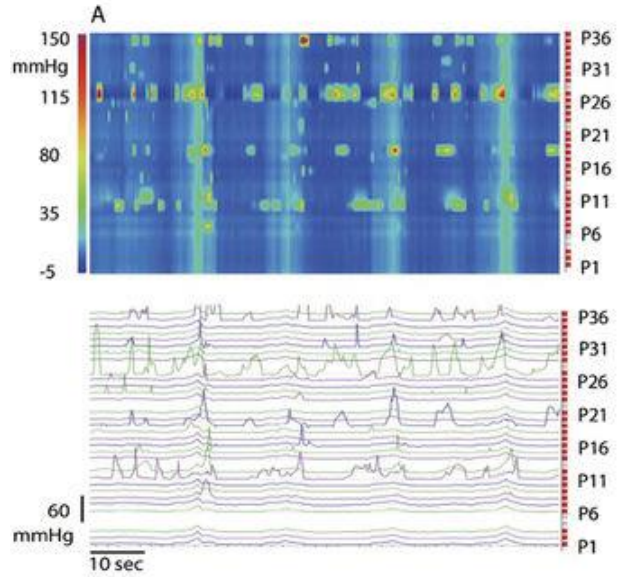
- The Motility Doctor will call you with results in approximately 1-2 weeks following the study and provide recommendations on how to further manage your child's care

Who do I call if I have any questions?

- Call the motility nurse at 801-662-1619, option 2, option 2



Computer Cart



Pressure Tracings



Solid State
Manometry Catheter



Water Perfused
Manometry Catheter



Endoscope or
Colonoscope