ANORECTAL MANOMETRY AND EMG TESTING

Your doctor has recommended anorectal manometry and EMG testing. This procedure is performed by a nurse practitioner educated in this procedure. Due to the sensitive nature of your problem, this procedure will be performed in a private room and every effort will be made to respect and guard your privacy. The following information will help you understand the procedure.

ANORECTAL MANOMETRY
Anorectal manometry is a test performed to evaluate patients with constipation or fecal incontinence. This test measures the pressures of the anal sphincter muscles, the sensation in the rectum, and the neural reflexes that are needed for normal bowel movements.

EMG (Electromyography)
Electromyography (EMG) is a test performed to evaluate patients with constipation or fecal incontinence. The test measures the anal sphincter muscle electrical activity, evaluating the nerve supply to the anal muscle. Anal sphincter EMG confirms the proper muscle contractions during squeeze and muscle relaxation during push are occurring.

THE PROCEDURE
The test takes approximately 30 minutes. The nurse practitioner will explain the procedure to you, take a brief health history, and answer any questions you may have. The patient then lies on his or her left side. A small, flexible tube, about the size of a thermometer, with a balloon at the end is inserted into the rectum. The catheter is connected to a machine that measures the pressure. During the test, the small balloon attached to the catheter may be inflated in the rectum to assess the normal reflex pathways.

The nurse practitioner will also ask the person to squeeze, relax, and push at various times. The anal sphincter muscle pressures are measured during each of these maneuvers. To squeeze, the patient tightens the sphincter muscles as if trying to prevent anything from coming out. To push or bear down, the patient strains down as if trying to have a bowel movement. After the examination, you may drive yourself home and go about your normal activities.

WHAT CAN BE LEARNED FROM ANORECTAL MANOMETRY?
The anal and rectal area contains specialized muscles that are helpful to regulate proper passage of bowel movements. Normally, when stool enters the rectum, the anal sphincter muscle tightens to prevent passage of stool at an inconvenient time. If this muscle is weak or does not contract in a timely way, incontinence (leakage of stool) may occur.

Normally, when a person pushes or bears down to have a bowel movement, the anal sphincter muscles relax. This will cause the pressures to decrease allowing evacuation of stool. If the sphincter muscles tighten when pushing, this could contribute to constipation. Anal manometry measures how strong the sphincter muscles are and whether they relax as they should during passing a stool. It provides helpful information to the doctor in treating patients with fecal incontinence or severe constipation.

There are many causes of fecal incontinence. Weak anal sphincter muscles or poor sensation in the rectum can contribute to fecal incontinence. If these abnormalities are present, they can be treated. Biofeedback techniques using anal manometry and special exercises of the pelvic floor muscles can strengthen the muscles and improve sensation. This can help treat fecal incontinence.

There are many causes of constipation. Some involve sluggish movement through the whole colon, whereas others involve the anal sphincter muscles. In some patients with constipation, the anal sphincter muscles do not relax appropriately when bearing down or pushing to have a bowel movement. This abnormal muscle function may cause a functional type of obstruction. Muscles that do not relax with bearing down can be retrained with biofeedback techniques using anal manometry.

**RISKS OF ANORECTAL MANOMETRY**

Anorectal manometry is a safe, low risk procedure and is unlikely to cause any pain. Complications are rare: it is possible that a perforation (tearing) or bleeding of the rectum could occur. Equipment failure is a remote possibility. If you are allergic to latex, you should inform the staff and Nurse Practitioner before the test so that a latex free balloon can be used.

**PREPARATION FOR THE PROCEDURE**

1. Purchase 2 Fleet Enemas (green and white box) from a pharmacy or supermarket.
2. Give yourself the two Fleet Enemas 2 hours prior to leaving your house for your study.
3. You should not eat anything during the two hours prior to the procedure. If you are diabetic, this may involve adjusting your diabetic medications.
4. You may take regular medications with small sips of water at least 2 hours prior to the study.

**FOLLOW UP APPOINTMENT**

Please call our office to arrange an office visit 3 to 4 weeks after the test to discuss the results.

**PLEASE CALL OUR OFFICE WITH ANY QUESTIONS (816-941-0800)**