

## POSITION STATEMENT

### *Performance of Gastrointestinal Manometry Studies and Provocative Testing*

#### Disclaimer

The Society of Gastroenterology Nurses and Associates, Inc. (SGNA) assumes no responsibility for the practices or recommendations of any member or other practitioner, or for the policies and procedures of any practice setting. Nurses and associates function within the limitations of licensure, state nurse practice act, and/or institutional policy.

#### Definitions

For the purpose of this document, SGNA has adopted the following definitions:

**Anorectal manometry** refers to a catheter with sensors measuring pressures which include the anus and rectum and the area in between (SGNA, 2013a).

**Esophageal manometry** measures pressures throughout the regions of the esophagus, which include the upper esophageal sphincter (UES), esophageal body, and lower esophageal sphincter (LES) (SGNA, 2013a).

**Antroduodenal manometry** refers to the measuring of gastric and small intestinal contractions (SGNA 2013a).

**Gastrointestinal manometry** is a broad term for all diagnostic tests that measure changes in intraluminal pressure and the coordination of activity in the muscles of the gastrointestinal (GI) tract (SGNA, 2013a).

**Gastroenterology Nurse** refers to practitioners (Advanced Practice Registered Nurse, Registered Nurse, and Licensed Practical Nurse/Licensed Vocational Nurse) in gastroenterology, hepatology or endoscopy.

**High resolution manometry (HRM)** has the advantage of displaying the dynamics of the entire esophagus and sphincters as colors assigned to the pressures called a Clouse plot. High resolution manometry is evolving technology with new types of pressure measurements and classifications of manometry abnormalities (SGNA, 2013a).

**Impedance manometry** refers to the technology that combines impedance sensors with pressure sensors throughout the esophagus to measure bolus clearance (SGNA, 2013a).

**Licensed Practical/Vocational nurse** refers to Licensed Practical Nurse (LPN) and Licensed Vocational nurse (LVN) (SGNA, 2013b).

**Nursing Assistive Personnel (NAP)** refers to individuals who are trained to function in an assistive role in the gastroenterology setting. Nursing Assistive Personnel who have specialized training or education in a specific area (gastroenterology), may be further classified as Technicians, for example, GI assistants, GI technicians, GTS (GI Technical Specialist) or AGTS (Advanced GI Technical Specialist) who have direct patient care responsibility and are supervised by a GI Registered Nurse (RN) (ANA, 2007; SGNA, 2013b).

**GI Registered Nurse** refers to Advanced Practice Registered Nurse (APRN) and Registered Nurse (RN) (2013b).

**Provocative testing** refers to a technique designed to reproduce non cardiac chest pain that may be esophageal in origin (SGNA, 2013a).

**Sphincter of Oddi manometry** refers to a recording of pressures within the Sphincter of Oddi, usually obtained during endoscopic retrograde cholangiopancreatography (ERCP) (SGNA, 2013a).

### **Background**

The gastroenterology nurse and associate continue to have a prominent role in the diagnosis of motility abnormalities including procedures of esophageal (standard or high resolution), sphincter of Oddi, impedance, antroduodenal and anorectal manometry. Nursing care of the patient undergoing these studies involves (SGNA, 2009; SGNA, 2013a):

- Identification of indications and contraindications,
- Nursing assessment,
- Medication administration, if indicated,
- Probe insertion,
- Performance of the study,
- Patient Education,
- Recognition of potential complications, and
- Documentation.

Pediatric patients undergoing manometric procedures also require a nurse or associate familiar with the special developmental and behavioral needs of this population (Di Lorenzo et al., 2002; Nurko, 2004).

Provocative testing may include pharmacological and non-pharmacological agents.

### **Position**

The role of the gastroenterology nurse and associate includes reporting the manometric findings, maintaining the equipment and recognizing technical difficulties or mechanical

malfunction (Conklin, Pimentel, & Soffer, 2009; Murray Clouse, & Conklin, 2003; Parkman & Orr, 2007).

The Society of Gastroenterology Nurses and Associates, Inc. recommends that the GI personnel responsible for manometry and provocative testing have the education, knowledge of medications, and technical skills for the test being performed and follow institutional guidelines. Personnel performing the study must have knowledge of anatomy and physiology and be prepared to identify untoward patient reactions.

The GI registered nurse experienced in gastroenterology nursing and manometry studies is responsible for assessing, educating, and preparing the patient, and performing the study. During the procedure the GI registered nurse documents events and pertinent information (e.g., patient position) on the tracing necessary for interpretation by the physician. The GI registered nurse must be prepared to intervene in the event of untoward reactions, including but not limited to epistaxis, vaso-vagal reactions, syncope, intravenous (IV) infiltration, and adverse reactions to medications used for provocation.

The Society of Gastroenterology Nurses and Associates, Inc. supports the position that the licensed practical/vocational nurse and the nursing assistive personnel, experienced in gastroenterology and/or manometry studies, may be given the responsibility of preparing the patient and performing the study under the direction of the GI registered nurse and/or physician. The LPN/LVN and NAP may document events during the procedure on the tracing that correspond to patient activity for interpretation by the physician.

The Society of Gastroenterology Nurses and Associates, Inc. recommends GI nurses and associates follow state, institutional and manufacturer guidelines for performance of these procedures. The Society of Gastroenterology Nurses and Associates, Inc. also recommends that the responsibility to perform pharmacological provocative testing be limited to qualified GI registered nurses.

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## **Recommended Reading**

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