# AUSTIN RADIOLOGICAL ASSOCIATION ULTRASOUND PROTOCOLS

Procedure Name: Hypertrophic Pyloric Stenosis

Updated: 01/30/12 approved 9/2011

#### **Indications:**

May include but not limited to abdomen pain, nausea and/or vomiting, palpable or suspected masse i.e. "olive sign" follow up to prior exam, or any other valid medical reason. **Typical age is anywhere from the first week of life up to 10 weeks of age**.

### **General Description:**

This is a survey of the pyloric muscle, duodenal bulb and antrum of the stomach.

# **Patient Preparation:**

NPO 2hrs prior to exam.

# **Imaging Sequence:**

The following imaging sequence is for a normal exam. Include additional images of pathology to demonstrate dimensions in two planes, texture, size, shape, and relationship to adjacent anatomy. Utilize color flow to aid in the determination of any possible abnormality and to demonstrate blood flow.

- 1. Long and Trans images through pylorus muscle
- 2. Measure muscle wall thickness in Trans
- 3. Measure length of muscle; keep in mind that a normal muscle has a pliable and changing appearance depending on stomach contraction and position of the pt. A good marker that shows that the entire normal channel has been included is seeing air shadowing in the duodenal bulb. If you see fluid or air passing through the channel, document it by picture or note.
- 4. Positive indicators for Hypertrophic Pyloric Stenosis include: wall thickness greater than or equal to 3mm; pyloric canal length greater or equal to15mm; (the thickened muscle is fixed and unchanging in configuration).
- 5. If study is negative, referring physician may request UGI to follow.