



Spring -Summer 2007 Newsletter

Medical technology continues to advance in ways that I never believed imaginable. In this newsletter, I will be focusing on **atypical presentations of gastroesophageal reflux disease**. I will introduce you to a fascinating technology that I have found to be very useful in diagnosing gastroesophageal reflux disease presenting with extra esophageal manifestations.

Which comes first the chicken or the egg? Is a zebra black with white stripes or white with black stripes? Could GERD be the cause of my patient's chest pain? What is the cause of my patient's hoarseness and constant throat clearing?

In addition to the "typical" symptoms of gastroesophageal reflux infants in children including: Poor growth, regurgitation, sleep disturbance, irritability, chest pain, dysphasia, feeding refusal, Sandifer syndrome and hematemesis there are multiple "**atypical manifestations of GERD**". At least 25% of these atypical manifestations are **respiratory symptoms including asthma**. **Various other symptoms reported include chronic cough, pneumonia, bronchitis, apnea, laryngitis, vocal cord polyps, chronic hoarseness, throat clearing, globus sensation, pharyngitis, sinusitis, dental erosions, and halitosis**. In addition, gastroesophageal reflux is becoming important as a comorbid condition of other medical problems including obesity, an epidemic in the US.

Unfortunately, there is no published gold standard for diagnosing gastroesophageal reflux disease in children. Various tools are available including empiric trials using PPIs, radiographic studies, upper endoscopy and esophageal pH monitoring. Ambulatory pH monitoring has the highest diagnostic yield for noncardiac chest pain.

Outpatient esophageal pH monitoring can be a useful tool in diagnosing extraintestinal manifestations of gastroesophageal reflux disease. Unfortunately, many children have difficulty tolerating the traditional pH probe, which is placed into the distal esophagus through the nares attached by a wire. In addition to the discomfort of having a wire extending from their nose to the distal esophagus, they also suffer from the inconvenience of attachment of the proximal part of the wire to the receiver. The Bravo pH probe technology has been a phenomenal development in improving comfort and lifestyle for the patient undergoing esophageal pH monitoring.

The Bravo pH probe capsule is a 26 x 6 x 6.3-mm device, which is placed in the distal esophagus at the time of upper endoscopy. A suction device is used to attach the probe to the superficial esophageal mucosa where it generally stays for a period of 3-5 days and then falls off. For 48-hour period of time, pH measurements are recorded and the data is transmitted to a receiver device, approximately the size of the pager, which is worn outside of the body. The patient and their family are asked to keep a journal recording activities such as meals, sleep, and bothersome symptoms. The data is used to establish a correlation between the patient's symptoms and gastroesophageal reflux episodes. As the esophageal mucosa sloughs, the capsule falls off. It then passes automatically, travels through the alimentary canal and is shed in the stool a few days later. (No, the patient does not have to return the capsule, only the receiver!). The first case report of upper pH monitoring in children using the Bravo capsule was April of 2004 in *The Laryngoscope*. This study looked at a total of 25 children with an average age of 3 years and a range of 3 months to 11 years. No complications were reported.

I would like to thank all of my referring physicians for your ongoing support of my practice. Even in the age of “global warming” and the “changing climate” of medicine, I continue to love practicing pediatric gastroenterology. I will continue to strive to provide excellent care in a timely fashion.

I am currently accepting the following insurance plans:

- Accountable Health Plans/Interplan Helath Group
- Aetna
- Aymed
- Beech Street
- Blue Cross/Blue Shield of Florida
- CCN
- Champus/Tricare Standard
- Cigna Healthcare of Florida
- Evolutions
- Great West
- Healthchoice
- Health-First Health Plans
- Humana
- Nexcaliber
- Private Healthcare Systems
- Southcare PPO
- United Healthcare of Florida
- USA MCO, Inc.

IMPORTANT CODING UPDATE:

In efforts to improve compliance with coding requirements and regulations, we are enlisting your help in accurate terminology usage when requesting consultations. According to healthcare coding standards using the word “Referral” implies that you are transferring your patient’s care to us, when, in fact, this is not the case. In contrast, using the word “Consult” implies that you are sending your patient to another physician for consultation purposes and not transferring care. Please help us in our efforts to become compliant with healthcare standards by taking the time to fill out our Consult form. Our office will fax this form to you whenever you send a patient to us for a consultation. You may also visit our website at www.childrensgi.com and download this form, or any other forms you may be interested in. We appreciate your assistance with this important matter.

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