Results: Seventy-two sequentially enrolled subjects participated in the study (27 in the VA, 45 at the university hospital). Eighty-two percent were male, and 97% were Caucasian. The mean age of the cohort was 60, with the VA patients being slightly older than the university patients 63 vs. 57, p = 0.02).

Subjects at both sites grossly over-estimated their yearly risk of cancer. On average, subjects estimated that they had a 13% risk of cancer in the upcoming year. Although both groups greatly over-estimated their risk, VA patients estimated a significantly higher risk of cancer than university patients (22% vs. 8%, p = 0.01). Lifetime risk perception was also over-estimated, with a mean lifetime risk of cancer estimated to be 22%. Risk perception also appeared to affect the subject’s healthcare behavior. Those subjects who estimated the highest risk also had a trend toward more frequent surveillance endoscopies to monitor their Barrett’s (p = 0.09).

Conclusions: Subjects with Barrett’s esophagus at these two centers greatly over-estimated their risk of esophageal cancer. High perceived risk was associated with a trend toward more intensive endoscopic surveillance behaviors. Efforts to educate subjects with BE on their risk of cancer are warranted and may change healthcare behaviors.

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AN UNUSUAL PRESENTATION OF ACHALASIA IN A PREEXISTENT BARRETT’S ESOPHAGUS
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Purpose: Barrett’s esophagus and Achalasia are two conditions that have different etiologies and presentations. It has been well documented in the literature that Barrett’s esophagus can develop after pneumatic dilatation or esophagomyotomy for Achalasia. This is due to incompetence of LES and acid reflux. We present a case that represents other way around, a rare case of new onset of Achalasia presenting with dysphagia, in a preexistent Barrett’s esophagus.

Case: A 57 yr old white male who initially presented with heartburn. An EGD, performed in 2000, revealed salmon color mucosa between 37 to 40 cm. Biopsies taken revealed Barrett’s esophagus without any dysplasia. 2 years later he developed progressive dysphagia, with regurgitation of food and weight loss. EGD was repeated (August 2002), which revealed Candidal esophagitis in addition to Barrett’s esophagus. CT scan was unreconstructable. Barium swallow was consistent with Achalasia. This was later confirmed via Manometry, revealing low amplitude contractions in the body of the esophagus with elevated LES pressure and poor relaxation on swallowing. A diagnosis of Achalasia was made. EGD was repeated once patient had completed antifungal therapy. Endoscopic and histological findings were still consistent with Barrett’s esophagus without any dysplasia. Repeat CT scan fails to show any signs of malignant process or pseudoachalasia. A surgeon proposed elective esophagectomy, due to small but finite possibility of underlying malignant process, which was refused by the patient. PET scan and endoscopic ultrasound were performed, both of which were negative for underlying cancer. EGD was repeated again and botox injections were performed. At follow-up visit six months later, patient reported much improvement in his symptoms with definite weight gain. A repeat CT scan was still normal.

Conclusions: Our search of English literature did not show any cases of Achalasia developing in a patient with preexistent Barrett’s esophagus. Although few cases of Barrett’s esophagus developing in patients with preexistent Achalasia has been reported, our case is unusual, as this presentation has never been documented. One of the key issue in this presentation was to rule out underlying malignant process. We have ruled out pseudoachalasia by performing all the currently available tests, including CT scan, PET scan and endoscopic ultrasound. We will present manometric tracing and endoscopic images of this patient and will also discuss our plans for future surveillance of this patient.

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ESOMEPROZALE 20 MG ADMINISTERED AS A 30-MINUTE INFUSION PROVIDES A SIMILAR LEVEL OF ACID CONTROL AS ORAL ADMINISTRATION IN HEALTHY SUBJECTS

Purpose: Esomeprazole administered orally once daily is more effective in controlling intragastric pH than standard oral doses of all other proton pump inhibitors. An intravenous (IV) formulation of esomeprazole has been developed for administration via injection or infusion in patients for whom oral administration is inappropriate.

Methods: This was an open, randomized, two-way crossover study in healthy male and female volunteers. Subjects received esomeprazole 20 mg orally or via a 30-minute intravenous infusion once daily 30 minutes before breakfast for five days. Treatment periods were separated by a washout period of at least 13 days. Intragastric pH was measured throughout days 1 and 5 using a bipolar glass microelectrode. Time with intragastric pH < 4 during day 1 and day 5 was analyzed separately, using a mixed-model ANOVA.

Results: There were 24 evaluable subjects (15 males), with a mean age of 26.6 years and a mean body mass index of 22.7 kg/m². There were no significant differences in time with intragastric pH < 4 on day 1 or day 5 of treatment between IV infusion and oral administration of esomeprazole 20 mg (Table). There were no serious adverse events and both administration routes were well tolerated.

Mean time (h) with intragastric pH < 4 during day 1 and day 5 of treatment with esomeprazole 20 mg via IV infusion or orally (po) (95% CIs)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Day 1 (n=24)</th>
<th>Day 5 (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 mg IV</td>
<td>7.3 (5.9–8.7)</td>
<td>11.9 (10.1–13.7)</td>
</tr>
<tr>
<td>20 mg po</td>
<td>6.6 (5.2–8.0)</td>
<td>12.3 (10.4–14.1)</td>
</tr>
<tr>
<td>IV — po</td>
<td>0.7 (–0.2–1.7)</td>
<td>0.4 (–1.9–1.1)</td>
</tr>
</tbody>
</table>

Conclusions: Esomeprazole 20 mg provides a similar level of acid control on day 1 and day 5 whether administered as an IV infusion or orally. Short term IV infusion of esomeprazole 20 mg is therefore an effective alternative to oral administration in appropriate patient populations.


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SLEEP AROUSAL IN PATIENTS WITH GASTROESOPHAGEAL REFLUX
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Purpose: GERD is a common disorder; up to 40% of adults in the US report symptoms on at least a monthly basis. Questionnaires have been developed to assist in research trials and one standardized questionnaire was shown to predict patient response to proton-pump inhibitor therapy. Insomnia is also prevalent, affecting up to one-third of adults. The exact relationship between these disorders is not fully understood. However, studies have shown that acid infusion into the esophagus increases arousals and decreases latency to arousal. Our aim was to: 1. Compare questionnaire results with 24-hour pH monitoring and 2. Specifically compare supine reflux with the presence of nocturnal symptoms related to sleep arousal.

Methods: We adapted a validated questionnaire (Carlsson R) by adding questions relating to nocturnal symptoms and distributed it to seventy patients referred to our motility center for 24-hour pH monitoring. The range of possible scores on the standardized portion of the questionnaire scores was (–7) to 18.

Results: The average percentage of time the pH was less than 4.0 in patients who scored 8 or more points was 8.7, while the average time for...
those who scored 7 points or fewer was 3.7. Using a cut-off between 7 and 8 points, the sensitivity in predicting a positive 24-hour pH probe was 66.7%, while the specificity was 71.1%. The PPV of the questionnaire was 56.0%, while the NPV was 79.4%. The questions dealing with nocturnal symptoms were evaluated with a similar scoring system with a range of 0 to 24 points. Patients with normal amounts of esophageal acid exposure in the supine position had an average symptom score of 9.0 while those with abnormal amounts of esophageal acid exposure in the supine position had an average symptom score of 11.0. Applying the same nocturnal symptom score to esophageal acid exposure in the erect position and total 24-hour acid exposure yielded 8.9/9.6 and 8.1/10.0 respectively.

Conclusions: 1. A standardized questionnaire is useful in assessing patients for the presence of GER as diagnosed by 24-hour pH monitoring. 2. A questionnaire, and by extension history taking, do not accurately reflect acid-related events at night that may be associated with sleep disorders. Further elucidation of the relationship between esophageal acid exposure and nocturnal symptoms/sleep disorders cannot be assessed by questionnaire or history alone and thus requires more objective testing such as combined 24-hour pH monitoring and overnight polysomnography.

62 MANAGEMENT OF ACHALASIA IN A PATIENT WITH ESOPHAGEAL VARICES
Tan Attila, M.D., Walter J. Hogan, M.D., Kia Saeian, M.D., Jose Franco, M.D.*. Medical College of Wisconsin, Milwaukee, WI.

Purpose: Achalasia is a relatively rare esophageal motor disorder. Definitive therapeutic options are directed toward altering lower esophageal pressure. These procedures are pneumatic dilatation and surgical esophagogastrectomy. The development of esophageal varices (EV) concurrent with achalasia would compromise these treatment options. We report the first case of achalasia complicated by EV and the results of transjugular intrahepatic portosystemic shunt (TIPS) to reduce portal hypertension.

TIPS decompressed EV prior to botulinum toxin injection in a patient with symptomatic achalasia and cirrhosis.

Methods: A 49 y/o cirrhotic pt developed progressively worsening solid/liquid dysphagia. Esophagogram revealed an air fluid level within the distended distal esophagus with tapering of the distal esophageal lumen. Esophageal manometry revealed aperistalsis, hypertensive lower esophageal sphincter pressure (62 mmHg), and incomplete relaxation with elevated intraluminal pressure.

Esophagogastroduodenoscopy (EGD) revealed narrowing at the level of the gastroesophageal junction without EV, or obstructive lesions. The pt first received pharmacotherapy (calcium channel blockers, nitrates) with relative improvement. The effectiveness of conservative management diminished within three years. At that time, laboratory values were notable for a decreased serum albumin (2.9 g/dL), thrombocytopenia (129K). Repeated EGD showed grade 2 EV and portal gastropathy.

Results: Because of advanced liver disease and varices, the pt was deemed a poor candidate for pneumatic dilation or myotomy. Thus, a TIPS procedure was performed to decompress the varices with subsequent botulinum toxin injection. Pre-TIPS gradient of 13 mmHg decreased to 3 mmHg post-TIPS. Post-TIPS EGD did not reveal varices. Botulinum toxin (100 units) was safely injected into the lower esophageal sphincter without any complications. Following the procedure, the patient was able to ingest solids and liquids without difficulty. Her symptoms were well controlled until she required a repeat botulinum toxin injection in 21 months after the initial injection.

Conclusions: Treatment of achalasia is targeted to improve esophageal emptying and to prevent complications by reducing the lower esophageal sphincter pressure. The presence of esophageal varices obviates the use of costumary invasive therapy for this disorder. To our knowledge this is the first case of symptomatic achalasia with esophageal varices successfully treated by a combination a TIPS and botulinum injection.

63 DURABILITY OF PNEUMATIC DIATION RESULTS AT LONG-TERM FOLLOW-UP
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Purpose: Pneumatic dilation (PD) is a widely used treatment modality in achalasia patients. Data are sparse describing the long-term outcome of PD. We have previously published our experience (Katz PO et al. Dig Dis Sci 43(9): 1973–7) in 72 patients followed for a mean of 6.5 years. Longer-term follow-up was acquired.

Methods: 35 of 72 patients dilated in the original series had available phone numbers and/or addresses. Two patients had died and one had advanced dementia. Sixteen responded to the questionnaire, which was almost identical to the initial questionnaire.

Results: 11 women and 5 men responded; their mean age was 58.5 years (range 27.9–77.5). Mean length of follow-up since the index PD was 11.9 years (7.4–16.3). Median successful improvement in swallowing was 90% (50–100%) and quality of life (QOL) was 90% (40–100%). In our previous series, a similar 95% swallowing improvement was achieved. The median number of episodes of liquid and solid food dysphagia was <1/week for both (range never to several times per day). Success was defined as no need for additional therapy for achalasia except the PDs performed in our lab. 2/16 patients required an additional procedure, one myotomy and one PD elsewhere. Median swallowing and QOL improvements were 55% and 45% for these two patients. When less than once a week solid and liquid dysphagia symptoms was considered as the definition of success, 9/16 had successful outcomes. Of the 7/16 who would therefore be considered unsuccessful dilations, the median QOL improvement was 90% (10–100%), equal to 90% for the successes (50–100%). The comparison between the success rate per the former definition (14/16 = 87.5%) vs. latter definition (9/16 = 56.25%) yielded a p=0.11 by Fisher’s exact test. Only 1/16 patients (who required PD elsewhere) would not obtain repeat PD if indicated.

Conclusions: Most patients with achalasia can expect long term improvement in dysphagia and quality of life after PD. Durability of response to PD is excellent. When symptom frequency is the arbiter of success, instead of need for repeat procedure(s), fewer patients are considered successful dilations; however, this difference is not statistically significant. Improvement in QOL was identical regardless of definition of success. PD should be considered as effective long-term treatment for achalasia.

64 PNEUMATIC DILATION FOR THE TREATMENT OF ACHALASIA IN PATIENTS WITH AND WITHOUT PRIOR HELLER MYOTOMY
Jason M. Guardio, D.O., Jason T. Connor, M.S., Marcelo F. Vela, M.D., Joel E. Richter, M.D.*. Cleveland Clinic Foundation, Cleveland, OH.

Purpose: Laparoscopic Heller myotomy (HM) in recent years has become a frequent and in some centers preferred therapy to treat achalasia. However, if a myotomy fails the next treatment course is controversial with fears that pneumatic dilation (PD) has high perforation risk. Our aim was to compare success and perforation risk of graded PD with Rigifex balloon system in achalasia patients without a prior HM (untreated cases) and those with a prior failed HM.

Methods: 108 patients, personally treated by the senior author from 1995–2002, were retrospectively evaluated: 96 untreated cases (53 male, 43 female, mean age 51 yrs) and 12 prior failed HM (7 male, 5 female, mean age 54 yrs). Demographics, symptoms (dysphagia and regurgitation) and physiologic studies (LES, timed barium swallow (TBS) height/width at 1 and 5 min) assessed pre and post PD. Success defined as symptom im-