



bind to a common GC-C receptor to stimulate fluid secretion in the gut. The present study demonstrates that SP-304 possesses a similar clinical profile as other GC-C agonists, based on the early clinical observations. Complete phase II clinical data on safety & efficacy in CC patients will be discussed.

Disclosure: Dr Shailubhai-Employee Dr Talluto-Employee Dr Steve Comiskey-Employee Dr John Foss-Employee Dr Alan Joslyn-consultant Dr Gary Jacob-Employee.

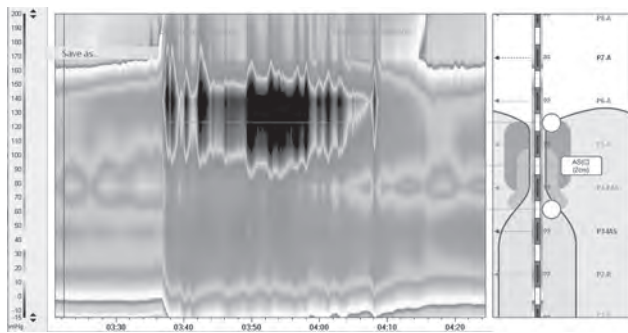
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**High Resolution Anorectal Manometry in Healthy Egyptian Population: Age, Gender, and Parity Influence**

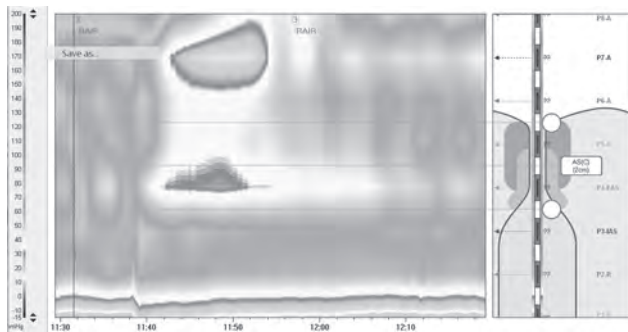
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**Purpose:** The aim was to study High Resolution Anorectal Manometry (HRAM) in Egyptian population and the influence of age, gender and parity on manometric parameters.

**Methods:** We studied 22 healthy volunteers 10 males and 12 females with median age 42 y (range: 18-61 y) by using solid state probe with 8 transducers 1 cm spaced with a rectal balloon mounted at the tip. The system is plotting graphs with high resolution topography and conventional pressure waves tracing as well (Solar GI MMS). Probe was introduced through the anal verge so the balloon is located at the rectum and the sensors at the rectum and anal



[1323] High resolution topography of maximum anal squeeze.



[1323] High resolution topography of RAIR.

canal. External EMG electrodes were applied on either sides of anus. Subjects were asked to relax, squeeze the anal sphincter, bear down, and cough to measure anal pressures at these situations. Rectal sensation and recto-anal inhibitory reflex (RAIR) were evaluated by stepwise intermittent (10 ml) balloon distention. Finally balloon expulsion test was done.

**Results:** Anal resting and maximum squeeze pressure were significantly higher in males than females (median; range: 61; 45-71 and 140.0; 67-224 vs. 42; 32-67 and 117; 58-220 respectively, P<0.05), while squeeze time, pressure increase to cough, push relaxation, RAIR, rectal sensation, and EMG were comparable in males and females. Age negatively correlated with some anorectal parameters (table 1), similarly parity negatively correlated with anal resting (r=-0.52, p <0.05) and squeeze pressure (r=-0.56, p<0.05). All subjects were able to expel the balloon.

**Conclusion:** HRAM helps understanding anorectal physiology. It is influenced by age, gender, and parity. This study can aid in diagnosis anorectal dysfunction in Egyptian population.

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**Is There a Unifying Pathophysiology of Medically Unexplained Symptoms in GW Veterans?**

2010 Presidential Poster

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**Purpose:** The prevalence of irritable bowel syndrome (IBS), dyspepsia, chronic fatigue syndrome (CFS) and other medically unexplained symptoms (MUS) in Gulf War (GW) veterans is high. It has been suggested that these problems are different manifestations of a common disorder. The aim of this study was to determine whether these independent symptoms based subgroups exist in GW veterans.

**Methods:** GW veterans (1990-1991) registered in two registries at two major Medical Centers were mailed the validated Bowel Disease Questionnaire inquiring about their bowel habits and somatic symptoms specifically inquiring about symptoms of CFS (fatigue, joint pain, general stiffness, headache, insomnia) and MUS (including backache, shortness of breath, palpitation, eye pain, dizziness, hot and cold spells, anxiety, and nervousness). Definition of IBS and dyspepsia were based on Rome III criteria. Data was analyzed using Hierarchical cluster analysis with average linkage using symptoms of IBS, dyspepsia, CFS, and other MUS.

**Results:** Data from 433 GW veterans registered at the two VA Medical Centers were analyzed. This population consisted of predominantly men (86%) with a median age 48 years (range 34-76). The prevalence of IBS, dyspepsia, and symptom components of CFS, and MUS is described in Table 1. There was significant overlap among all three disorders. Almost half (49.1%) of GW veterans with dyspepsia had IBS and 74% with IBS had dyspepsia. Forty-eight percent of GW veterans with IBS and 39% with dyspepsia also reported symptoms of CFS. The simultaneous presence of IBS, dyspepsia and CFS were reported by 12% of GW veterans. Cluster analysis suggests the presence of four clusters. IBS and dyspepsia form two separate clusters, third consists of CFS, and the fourth consists of other MUS (Figure).

**Conclusion:** MUS is common in GW veterans. Although IBS, dyspepsia, CFS, and MUS commonly co-exist, they form separate clusters. This would suggest that the pathophysiology of MUS in GW veterans cannot be explained by one unifying hypothesis and a single treatment is unlikely to be helpful.

[1323] Table 1. Correlation between age and manometry

	Anal pressure			Rectal sensation			
	Resting	Max squeeze	Cough increase	1st sensation	1st urge	Intense urge	Max tolerable
r	-0.44	-0.49	-0.371	-0.553	-0.420	-0.508	-0.380
P value	.039	.027	.051	.008	.05	.016	0.061