

716 - Associations Between the UCLA SCTC GIT 2.0 Vs. Objective Tests of Upper Gastrointestinal Involvement in Systemic Sclerosis

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Hall F2 - Poster Hall (McCormick Place West)

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Background/Purpose: UCLA-SCTC-GIT 2.0 is a 34 item instrument designed to assess gastrointestinal (GI) symptoms in systemic sclerosis (SSc). The objective of our study was to assess the associations between the upper GI symptom scales of the instrument (Reflux and Distention/ Bloating (D/B) scales) vs. objective/ laboratory studies of upper GI involvement.

Method: We enrolled 60 patients at 2 SSc centers (30 from the US, 30 from Europe) with SSc. Each patient filled out the GIT 2.0 and patients had barium swallow with small bowel follow through, gastric emptying study, lactulose breath test, endoscopy, esophageal manometry, HRCT of the chest, and laboratory tests (serum amylase, lipase, iron, 25 hydroxyvitamin D, vasoactive intestinal peptide, gastrin, carotene, methylmalonic acid, and celiac panel). We explored correlations between the Reflux scale scores vs. barium swallow, UGI endoscopic findings, and esophageal manometric abnormalities. We also explored correlations between the D/B scale scores vs. lactulose breath test, gastric emptying study, unplanned weight loss, and laboratory tests. Correlations were assessed using the Spearman's test. We calculated the average scores in patients with positive vs. negative tests and compared them using the T-test and Wilcoxon test.

Result: The mean (SD) age was 53.5 (11.7) yrs and participants were mostly women (90%); 50% had limited SSc. The mean (SD) Reflux score was 0.82 (0.64; moderate) and D/B score was 1.25 (0.85; moderate) The Reflux scale had statistically significant correlations with upper GI objective evaluations and was able to differentiate between patients with EGD proven esophagitis and manometric abnormalities (Table). There were no associations between the Reflux scores vs. HRCT findings for interstitial lung disease. D/B had non-significant associations with the objective tests (Table). Although D/B scores were higher in patients with positive tests, these were non-significant associated with objective measures. There were no significant correlations between laboratory values and GIT 2.0 scales.

Conclusion: The GIT 2.0 Reflux scale has significant-correlations with esophagitis on the EGD and upper GI dysmotility on barium swallow and was able to differentiate between patients with positive vs. negative tests. Although D/B scale scores were higher in patients with positive vs. negative tests, D/B scale had poor correlations with objective tests. Reflux and D/B scale scores complement the objective tests for assessment of the upper GI involvement.

UCLA SCTC GIT 2.0	Test	Correlations	Positive test	Negative test	p value
Reflux scale	Esophagitis on upper endoscopy (n=32)	0.46*	1.38(0.54) n=9	0.76(0.58) n=23	0.01
	Manometry abnormalities (n=29)	0.51*	1.39(0.70) n=15	0.69(0.59) n=14	0.01
	Dysmotility on barium swallow (n=22)	0.26	0.93(0.69) n=16	0.77(0.46) n=6	0.58
	Presence of fibrosis on HRCT (n=53)	-0.26	0.62(0.52) n=28	0.96(0.69) n=25	0.06
	Presence of ground glass on HRCT(n=51)	-0.11	0.62(0.37) n=16	0.88(0.71) n=35	0.45
	Distention/Bloating scale	Abnormal lactulose breath test(n=38)	0.07	1.35(0.94) n=21	1.12(0.91) n=17
Delayed gastric emptying(n=22)		0.13	1.48(1.15) n=11	1.14(0.73) n=11	0.55
Unplanned wt loss (n=53)		0.16	>5% of wt 1.46(0.71) n=10	<5% of wt 1.22(0.90) n=43	0.24

* P< 0.05

Keywords: gastrointestinal complications, outcome measures, quality of life and scleroderma

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