

**ONLINE SUPPORT FOR: “INTRALUMINAL PRESSURE PATTERNS IN THE HUMAN COLON ASSESSED BY HIGH-RESOLUTION MANOMETRY”**

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TABLE 1S -- PRESSURE PATTERNS AT BASELINE AND RESPONSE TO MEAL IN THE TWO CONTROL GROUPS

		Patients controls (n=9)		Healthy volunteers (n=5)	
		Baseline	Meal	Baseline	Meal
Simultaneous Pressure Waves (SPWs)	Occurrence (/30 min)	17.1±13.1 (9)	22.9 ±20.2 (9)	10.2 ± 4.9 (5)	11.1 ± 5.7 (5)
	Maximum rhythmicity (/min)	1.4 ± 0.6 (8)	2.0 ± 0.7 (7)	1.2 ± 0.2 (3)	1.7 ± 0.9 (4)
	Average Pressure duration (s)	16.0 ± 3.4 (8)	13.5 ± 3.1 (8)*	14.6 ± 4.0 (5)	14.0 ± 2.2 (5)
	Propagation distance (cm)	31.3 ± 8.1 (8)	29.0 ± 7.3 (8)	34.0 ± 2.5 (5)	31.2 ± 7.3 (5)
	Average amplitude (mmHg)	15.2 ± 7.7 (9)	18.0 ± 12.4 (9)	13.7 ± 5.1 (5)	8.5 ± 4.5 (5)** #
Antegrade Pressure waves (APWs)	Occurrence (/30 min)	1.1 ± 1.9 (8)	1.1 ± 1.7 (9)	0.8 ± 1.4 (5)	2.6 ± 3.7 (5)
	Maximum rhythmicity (/min)	2.0 (1)	2.8 (0.4) (2)	(0)	1.0 (1)
	Average Pressure duration (s)	18.6 ± 6.4 (3)	13.0 ± 4.8 (5)	8.5 (1)	16.9 ± 3.0 (2)

	Propagation distance (cm)	28.9 ± 6.2 (3)	30.7 ± 5.9 (5)	30.0 ± 8.5 (2)	29.4 ± 8.4 (3)
	Average amplitude (mmHg)	15.1 ± 2.2 (3)	15.8 ± 5.4 (5)	28.5 ± 10.6 (2)	23.3 ± 12.8 (3)
Retrograde Pressure Waves (RPWs)	Occurrence (/30 min)	0.1 ± 0.3 (9)	0.2 ± 0.5 (9)	1.4 ± 3.1 (5)	1.4 ± 2.1 (5)
	Maximum rhythmicity (/min)	(0)	(0)	0.4 (1)	(0)
	Average Pressure duration (s)	21.9 ± 7.2 (2)	14.1 ± 5.0 (3)	(0)	18.9 ± 5.8 (2)
	Propagation distance (cm)	26.0 ± 14.1 (2)	22.3 ± 12.2 (3)	(0)	28.8 ± 10.3 (2)
	Average amplitude (mmHg)	7.7 ± 3.7 (2)	15.9 ± 2.9 (3)	32.0 (1)	19.2 ± 11.1 (3)
Isolated Pressure Transients	Maximum amplitude (mmHg)	115.6 ± 42.5 (9)	109.0 ± 56.4 (9)	109.4 ± 71.1 (5)	108.3 ± 19.2 (4)
	Percentage of sensors involved	36.3 ± 18.1 (9)	35.6 ± 15.0 (9)	40.0 ± 9.0 (5)	45.2 ± 15.0 (5)
	Percentage of time involved	71.2 ± 17.8 (9)	60.2 ± 23.3 (9)	65.5 ± 14.1 (4)	68.5 ± 9.1 (4)
	Percentage with amplitude <50 mmHg	100 ± 0 (9)	100 ± 0 (9)	99.9 ± 0.1 (5)	98.9 ± 2.4 (5)
	Percentage with amplitude 50-100 mmHg	43.4 ± 33.6 (9)	38.2 ± 25.2	27.8 ± 22.9 (5)	21.6 ± 13.1 (5)
	Percentage with amplitude > 100 mmHg	17.4 ± 13.0 (9)	16.7 ± 12.9 (9)	12.3 ± 15.3 (5)	4.3 ± 4.2 (5)
High Amplitude Pressure Waves (HAPWs)	Occurrence (%)	0 (0%) (9)	2 (22.2%) (9)	0 (0%) (5)	0 (0%) (5)
Synchronized Haustral Pressure Waves	Occurrence (%)	1 (11.1%) (9)	2 (22.2%) (9)	1 (20%) (5)	2 (40%) (5)

\* p=0.018 (t=3.1, df=7), \*\*p=0.007 (t=5.2, df=4), baseline vs after meal, same subject group (paired samples t test)

# p=0.043 (B=-7.5, 95% CI -0.3 to -14.8) for post meal values in patients controls vs healthy controls (Multiple linear regression, adjusted for baseline values). No statistics were done with n<5.

TABLE 2S -- MOTOR PATTERNS AT BASELINE AND RESPONSE TO MEAL  
 PATIENTS WITH CONSTIPATION, WITH AND WITHOUT RESPONSE TO TREATMENT

Mean (min-max) (n)		Constipation Responders (n=8)		Constipation Non Responders (n=3)	
		Baseline	Meal	Baseline	Meal
Simultaneous Pressure Waves	Occurrence (/30 min)	12.5 (5.0-21.0) (8)	18.5 (8.5-36.6) (8)	5.3 (0.5-14.5) (3)	8.3 (0-16.0) (3)
	Maximum rhythmicity (/min)	1.3 (0.8-2.2) (8)	2.1 (1.5-3.0) (7)	1.3 (1)	0.6 (0.3-0.9) (2)
	Average Pressure duration (s)	16.5 (9.1-24.0) (8)	13.6 (10.4-20.6) (8)	12.8 (3.2-20.0)(3)	18.5 (18.3-18.7) (2)
	Propagation distance (cm)	33.4 (29.0-36.0) (8)	27.6 (20.0-36.0) (8)	35.2 (33.5-36.0) (3)	35.1 (34.2-36.0) (2)
	Average amplitude (mmHg)	14.4 (7.2-23.4)(8)	13.0 (6.4-21.9) (8)	15.0 (8.7-20.0) (3)	15.3 (11.5-19.0) (2)
Antegrade Pressure waves	Occurrence (/30 min)	0.4 (0-1.4) (8)	2.2 (0-10.3) (8)	0.9 (0-2.6) (3)	1.8 (0-5.4) (3)
	Maximum rhythmicity (/min)	(0)	1.6 (0.7-2.5) (2)	(0)	(0)
	Average Pressure duration (s)	14.7 (10.0-17.0)(3)	17.2 (14.9-23.0) (5)	17.1 (1)	21.1 (1)
	Propagation distance (cm)	16.4 (10.0-20.0) (3)	24.5 (10.0-36.0) (5)	36.0 (1)	36.0 (1)
	Average amplitude (mmHg)	22.3 (5.0-53.0) (3)	23.1 (6.0-35.0) (5)	11.5 (1)	16.5 (1)
Retrograde Pressure Waves	Occurrence (/30 min)	0.2 (0-1.2) (8)	1.3 (0-5.0) (8)	0(3)	0(3)
	Maximum rhythmicity (/min)	0	0	(0)	(0)
	Average Pressure duration (s)	15.0 (1)	11.7 (6.0-15.0) (4)	(0)	(0)
	Propagation distance (cm)	18.0 (1)	19.9 (10.0-30.3) (4)	(0)	(0)
	Average amplitude (mmHg)	12.0 (1)	26.6 (15.2-36.0) (4)	(0)	(0)
Isolated	Maximum amplitude (mmHg)	147.3 (60.0-212.0)	142.1 (45.0-223.0)	110.0 (47.0-149.0) (3)	153.0 (92.0-191.0) (3)

Pressure Transients		(8)	(8)		
	Percentage of sensors involved	45.1 (23.0-63.0) (8)	49.9 (23.0-76.0) (8)	22.4 (11.0-32.0) (3)	29.9 (18.0-36.0) (3)
	Percentage of time involved	76.5 (54.0-95.0) (8)	74.2 (62.0-85.0) (8)	61.2 (35.0-94.0) (3)	67.1 (41.8-88.0) (3)
	Percentage with amplitude <50 mmHg	100.0 (100.0-100.0)(8)	99.2 (96.0-100.0) (8)	88.2 (66.7-100.0) (3)	100.0 (100.0-100.0)(3)
	Percentage with amplitude 50-100 mmHg	53.1 (20.0-80.7) (8)	57.0 (7.5-83.7) (8)	43.6 (35.0-48.0) (3)	36.5 (15.5-67.0) (3)
	Percentage with amplitude > 100 mmHg	25.2 (0-47.0) (8)	23.8 (0-40.0) (8)	11.4 (0-24.0) (3)	20.2 (0-42.0) (3)
High Amplitude Pressure Waves (HAPWs)	Occurrence (%)	1 (12.5%) (8)	1 (12.5%) (8)	0(0%) (2)	0(0%) (2)
Synchronized Haustral Pressure Waves	Occurrence (%)	0 (0%) (8)	6 (75.0%) (8)	0(0%) (2)	0(0%) (2)

No statistical comparisons were performed because of low sample size of non-responders. Four of the 15 patients were not available for follow up.