FECAL INCONTINENCE CASE

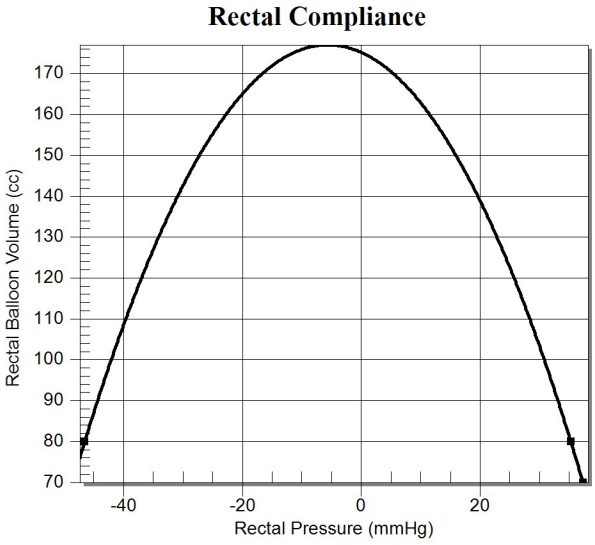
Diagnostic Anorectal Manometry

Patient:
Name:
Patient ID:
Gender: Female
DOB/Age: 07/24/1948

Physician:
Operator:
Referring Physician:
Examination Date:

Summary:

Resting		**Expel Empty**	
Anal mean (mmHg)	40	Rectal Pressure (Gradient) (mmHg)	35
Anal max (mmHg)	46	Anal Pressure (Gradient) (mmHg)	48
Squeeze		Anorectal Gradient (mmHg)	-14
Anal mean (mmHg)	49	**Expel Full**	
Anal max (mmHg)	59	Rectal Pressure (Gradient) (mmHg)	54
Squeeze Duration (sec)	1	Anal Pressure (Gradient) (mmHg)	39
Sensation		Anorectal Gradient (mmHg)	16
Rectal Capacity (cc)		**Exhale**	
RAIR (%)	absent	Anal mean (mmHg)	31
RB Volume at RAIR Threshold (cc)	absent	Anal max (mmHg)	57



Indications:
fecal incontinence

Notes:

Test Description:
After patient completed pre-procedure enema a digital rectal exam was performed. The ARM system was calibrated and the catheter with balloon attached was inserted to zero station and resting pressures were obtained. A second series of resting pressures were obtained at station 1 and 2, and the highest of these pressures were used for baseline resting pressure. Three separate squeezing tests were performed each for 20 seconds followed by straining on an empty balloon and a 60cc balloon. Finally, we measured how much volume in the balloon was required for the patient to first feel the balloon, to have the desire and urge to defecate, and to feel uncomfortable with the balloon. RAIR was calculated. Medspira mcompass software was used to evaluate the data and the curve was reviewed.

Results of Studies:
Mean Resting Pressure: 40 mmHg
Mean Squeezing Pressure: 49 mmHg
Expel Empty Pressure Gradient: -14 mmHg
Expel Full Pressure Gradient: 16 mmHg
Rectoanal Inhibitory Reflex: absent
Balloon Sensation was first noted at: 70 cc
Desire Sensation: 80 cc
Urge Sensation: 80 cc
Exhale Pressures: 31 mmHg

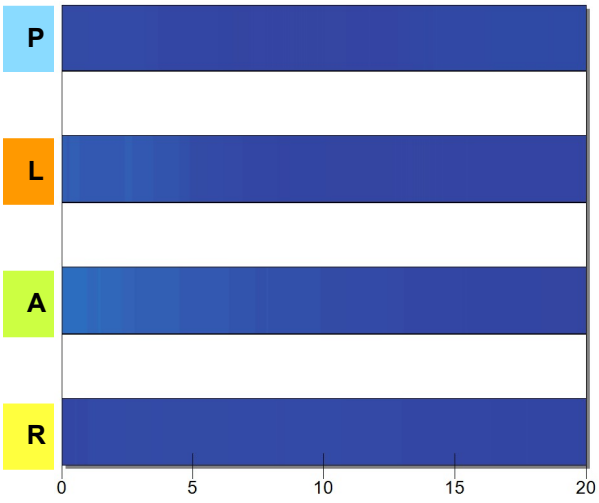
Summary:
1. Decreased resting pressures.
2. Low squeezing pressures.
3. Evidence of paradoxical activity during expulsion (straining) consistent with mild dyssynergia.
4. RAIR was absent.
5. 1st Sensation, Desire and Urgency were perceived at 70, 80, 80 CCs, which are slightly delayed.
6. Low exhale pressures.

Impression: Low anal pressures, with mild dyssynergia, RAIR absent. Delayed volume perception for sensation. Low exhale pressures are consistent and suggestive of FI.

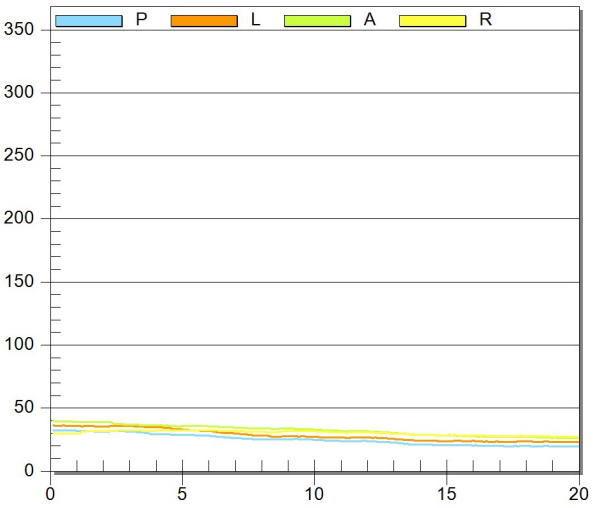
Recommendation: Patient will benefit from bowel regimen with fiber supplementations. Obtain EMG and investigative biofeedback therapy session. In case of no/minimal results from biofeedback, order sacral nerve modulation therapy (InterStim).

Patient ID:

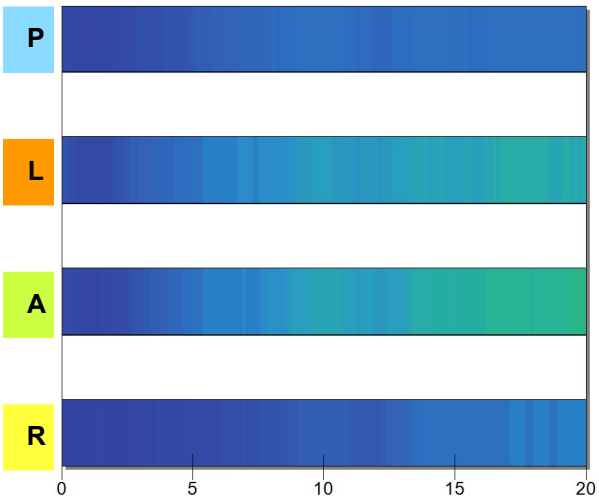
Resting 1 Depth: 0 cm



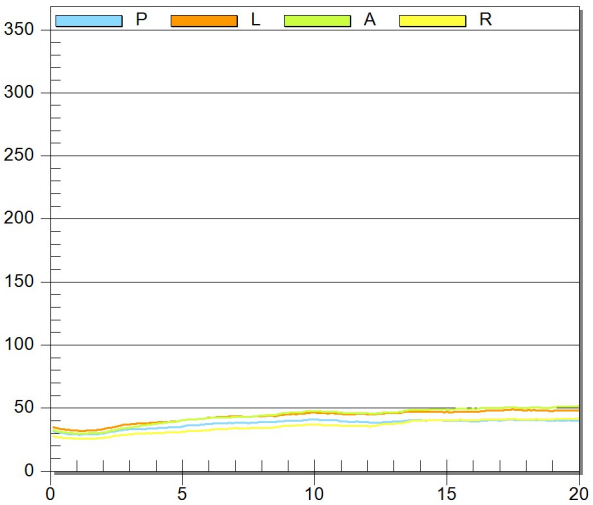
Resting 1 Depth: 0 cm



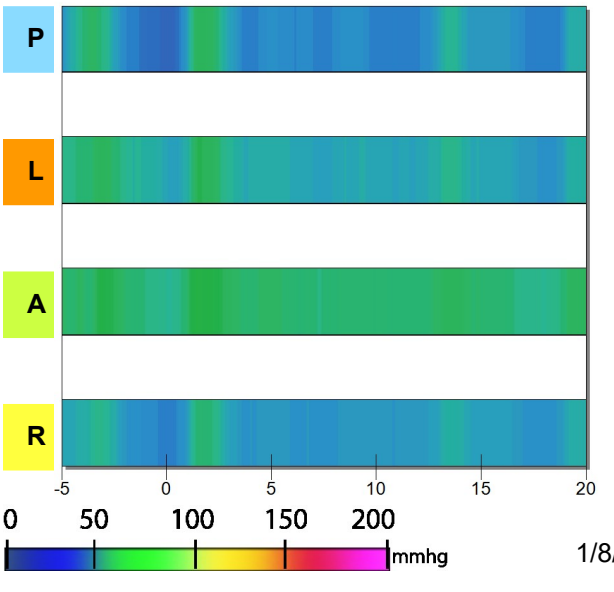
Resting 2 Depth: 1 cm



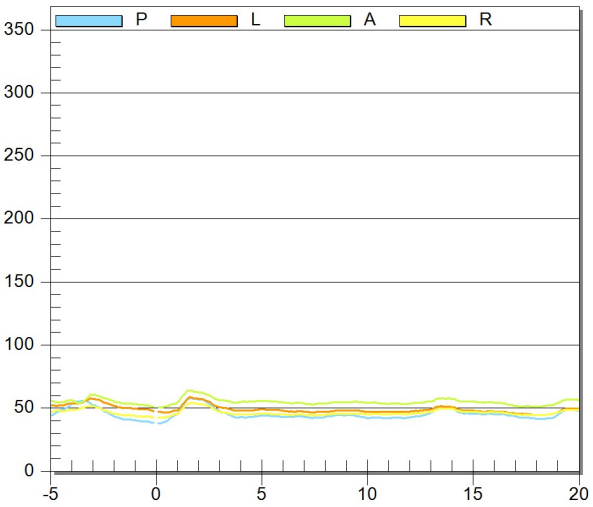
Resting 2 Depth: 1 cm



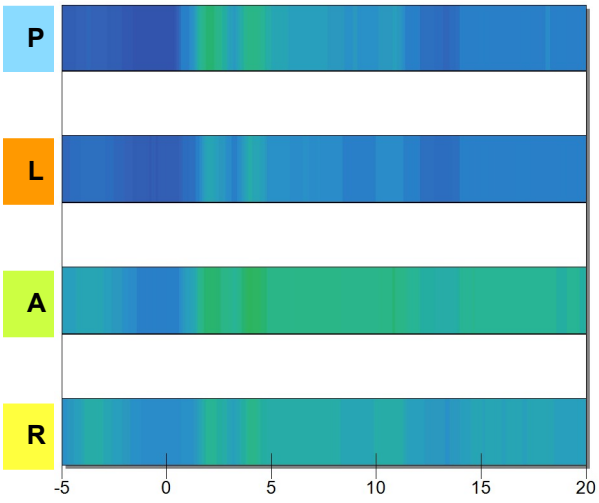
Squeeze 1 Depth: 1 cm



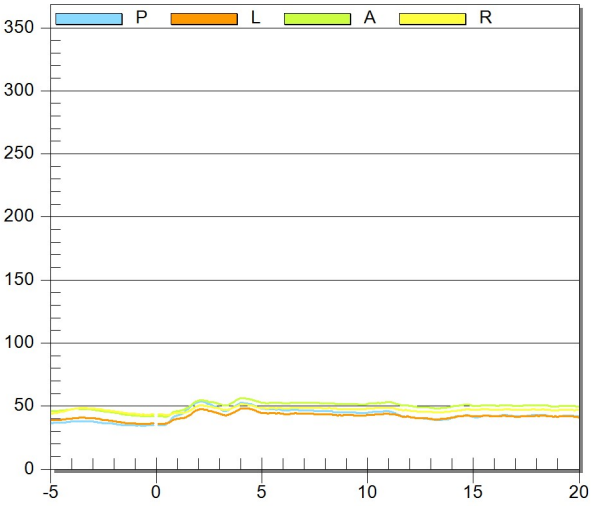
Squeeze 1 Depth: 1 cm



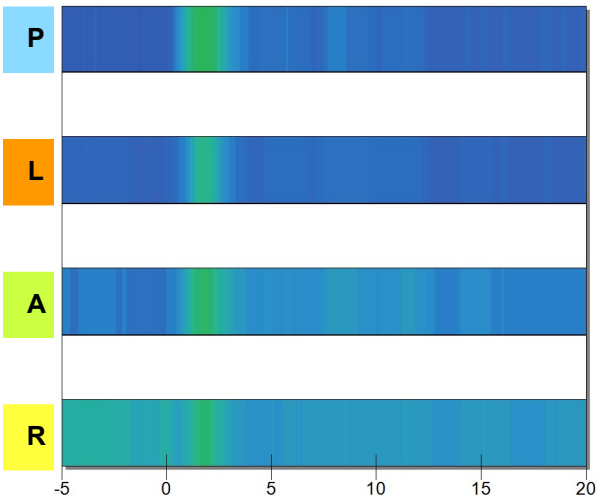
Squeeze 2 Depth: 1 cm



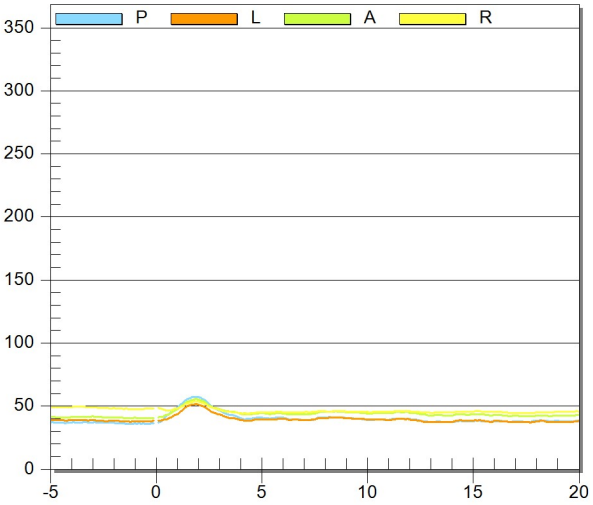
Squeeze 2 Depth: 1 cm



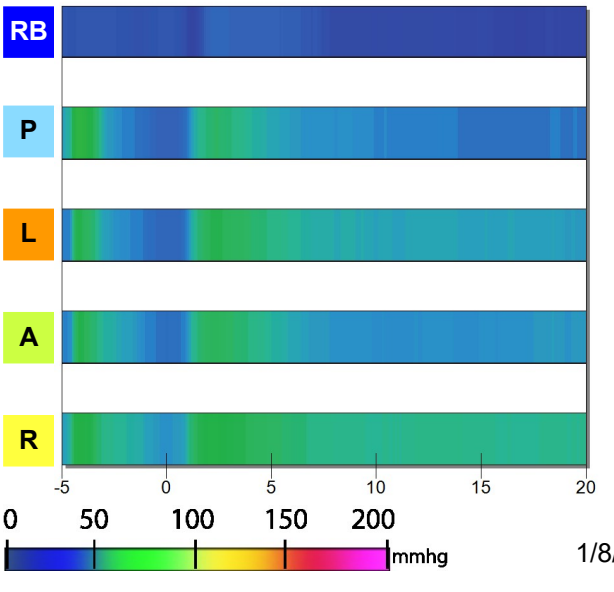
Squeeze 3 Depth: 1 cm



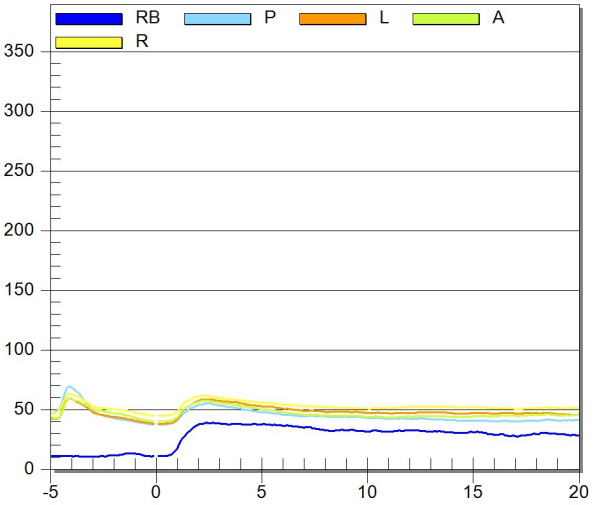
Squeeze 3 Depth: 1 cm



Expel Empty Depth: 1 cm

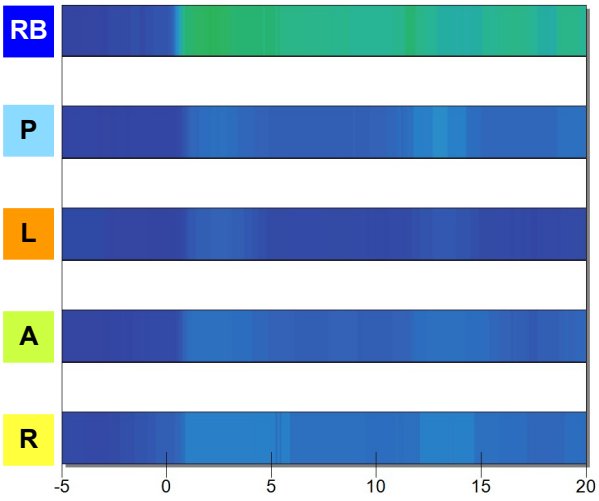


Expel Empty Depth: 1 cm

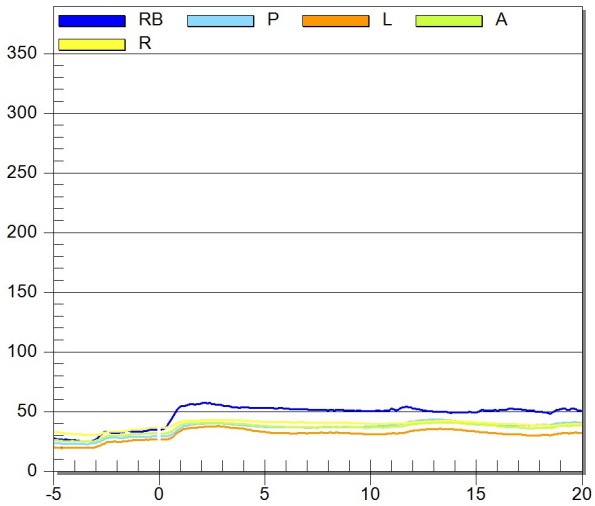


Patient ID:

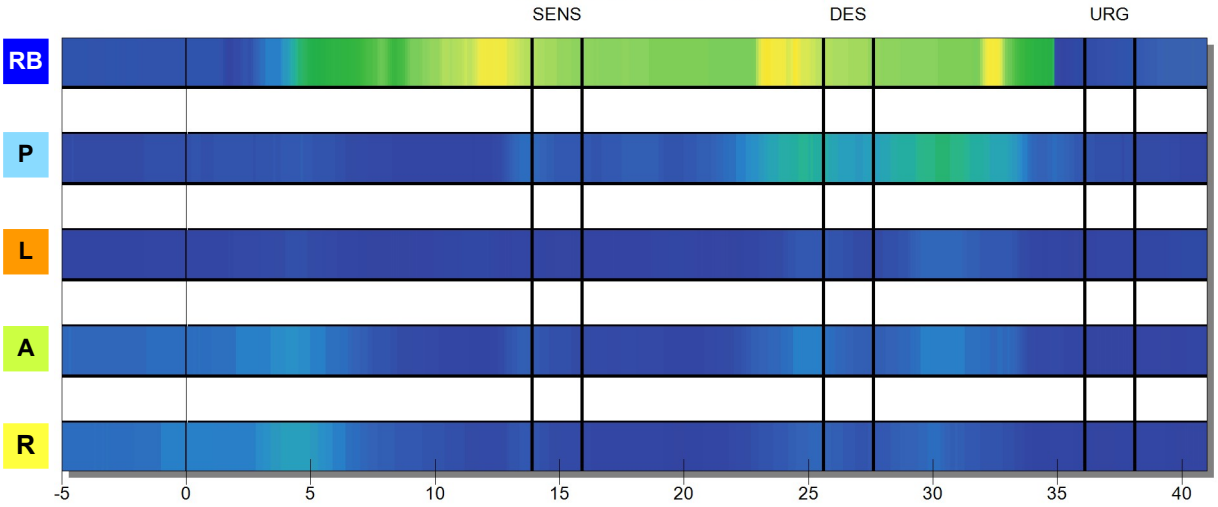
Expel Full Depth: 1 cm



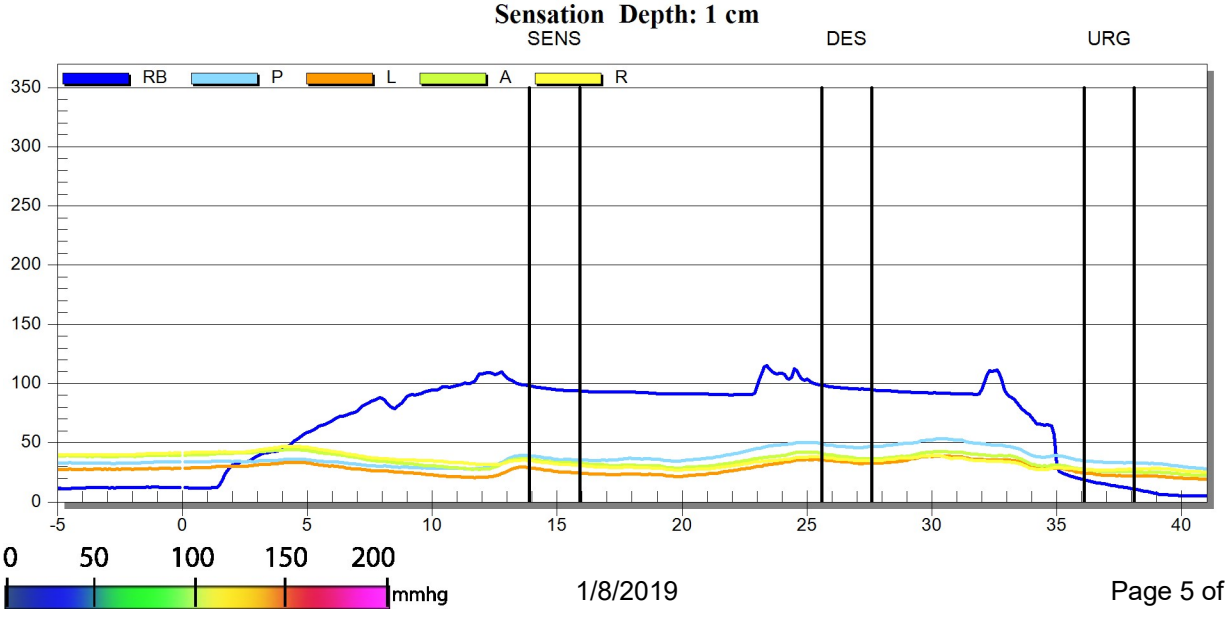
Expel Full Depth: 1 cm



Sensation Depth: 1 cm

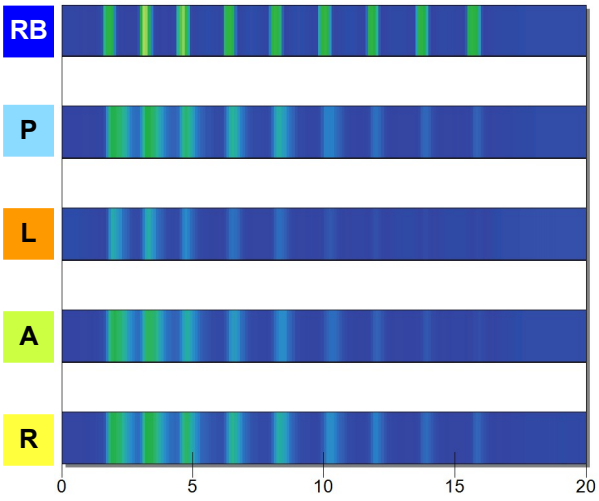


Sensation Depth: 1 cm

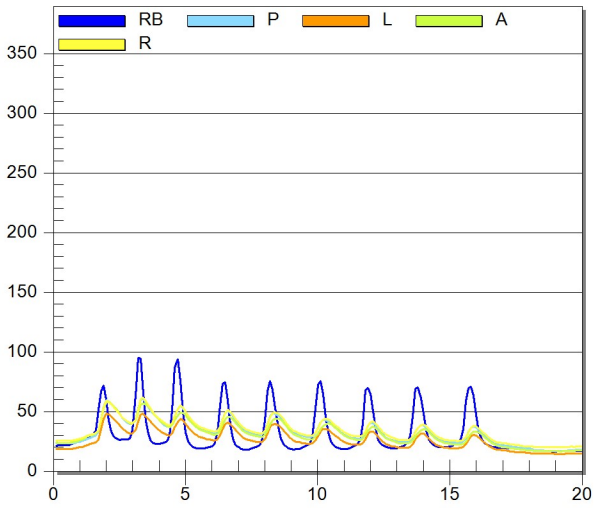


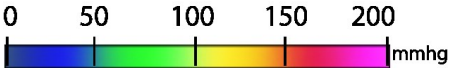
Patient ID:

Exhale Depth: 1 cm



Exhale Depth: 1 cm





Patient ID:

Resting

Maneuver #	1	2
Catheter Depth (cm)	0	1
P Max (mmHg)	33	41
L Max (mmHg)	36	49
A Max (mmHg)	40	51
R Max (mmHg)	32	42
P Mean (mmHg)	25	38
L Mean (mmHg)	28	43
A Mean (mmHg)	32	44
R Mean (mmHg)	30	35
Anal Max (mmHg)	35	46
Anal Mean (mmHg)	29	40

Squeeze

Maneuver #	1	2	3
Catheter Depth (cm)	1	1	1
P Max (mmHg)	58	54	57
L Max (mmHg)	59	48	51
A Max (mmHg)	64	56	56
R Max (mmHg)	54	52	54
P Mean (mmHg)	45	44	41
L Mean (mmHg)	48	43	40
A Mean (mmHg)	55	51	45
R Mean (mmHg)	46	47	46
Anal Max (mmHg)	59	52	55
Anal Mean (mmHg)	49	46	43
Squeeze Duration (sec)	1	5	2

Expel Empty

Maneuver #	1
Catheter Depth (cm)	1
RB Volume (cc)	10
P Min (mmHg)	37
L Min (mmHg)	38
A Min (mmHg)	40
R Min (mmHg)	45
P Mean (mmHg)	44
L Mean (mmHg)	49
A Mean (mmHg)	46
R Mean (mmHg)	53
Anal Min (mmHg)	40
Anal Mean (mmHg)	48
RB Max Pressure (mmHg)	39
RB Mean Pressure (mmHg)	32
Anal Relaxation (%)	1
Rectal Pressure Change (%)	179
Rectal Pressure (Gradient) (mmHg)	35
Anal Pressure (Gradient) (mmHg)	48
Anorectal Gradient (mmHg)	-14

Expel Full

Maneuver #	1
Catheter Depth (cm)	1
RB Volume (cc)	50
RB Diameter (mm)	48
P Min (mmHg)	29
L Min (mmHg)	26
A Min (mmHg)	31
R Min (mmHg)	36
P Mean (mmHg)	38
L Mean (mmHg)	33
A Mean (mmHg)	38
R Mean (mmHg)	41
Anal Min (mmHg)	31
Anal Mean (mmHg)	37
RB Max Pressure(mmHg)	57
RB Mean Pressure (mmHg)	51
Anal Relaxation (%)	-36
Rectal Pressure Change (%)	71
Rectal Pressure (Gradient) (mmHg)	54
Anal Pressure (Gradient) (mmHg)	39
Anorectal Gradient (mmHg)	16

Patient ID:

Sensation

Maneuver #	1		
Catheter Depth (cm)	1		
Rectal Capacity (cc)			
RAIR (%)	absent		
RB Volume at RAIR Threshold (cc)	absent		
Type	SENS	DES	URG
P Max (mmHg)	39	49	35
L Max (mmHg)	29	36	25
A Max (mmHg)	36	41	28
R Max (mmHg)	35	38	28
P Mean (mmHg)	37	47	34
L Mean (mmHg)	26	34	23
A Mean (mmHg)	34	38	26
R Mean (mmHg)	33	36	27
Anal Max (mmHg)	35	41	29
Anal Mean (mmHg)	32	39	27
RB Volume (cc)	70	80	80
RB Diameter (mm)	53	55	55
RB Mean Pressure (mmHg)	37	35	-47

Exhale

Maneuver #	1
Catheter Depth (cm)	1
RB Volume (cc)	10
P Max (mmHg)	60
L Max (mmHg)	48
A Max (mmHg)	58
R Max (mmHg)	62
P Mean (mmHg)	33
L Mean (mmHg)	26
A Mean (mmHg)	31
R Mean (mmHg)	34
Anal Max (mmHg)	57
Anal Mean (mmHg)	31