

Evaluating irritable bowel syndrome symptoms and pelvic floor dysfunction in patients with deep endometriosis of the posterior pelvis

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BACKGROUND

- Women with endometriosis have **2.4-fold risk** of fulfilling IBS criteria.
- **3-fold risk** of endometriosis diagnosis in women with IBS.
- Deep endometriosis (DE) infiltrates organs in the posterior compartment, including rectosigmoid colon, leading to bowel symptoms.

AIMS

- To describe IBS and pelvic floor dysfunction (PFD) in patients with DE.

METHODS

- Endometriosis protocol MRI 9/2015 to 7/2018.
- Survey GI symptoms at baseline.
- MRI reports identify DE.
- **IBS** = change in bowel frequency & improved/worse pain with defecation.
- **PFD** = MRI rectal gas volume (RGV) >900 m² (PPV 77%).

RESULTS

- 148 patients with survey + MRI endometriosis
- 56(37.8%) met baseline IBS criteria; 21(14%) patients prior IBS diagnosis
- Not more likely to have obstetric complications (21% vs.19%, OR 1.12; 95% CI 0.45-2.73, p=0.95).
- “Baseline IBS” was not associated with a higher likelihood of finding posterior DE.
- However, improvement of pain with defecation was significantly associated with posterior DE with OR 2.4 (95%CI 1.23-4.71, p= 0.011).

Figure 1. Overlap of endometriosis and pelvic floor dysfunction.

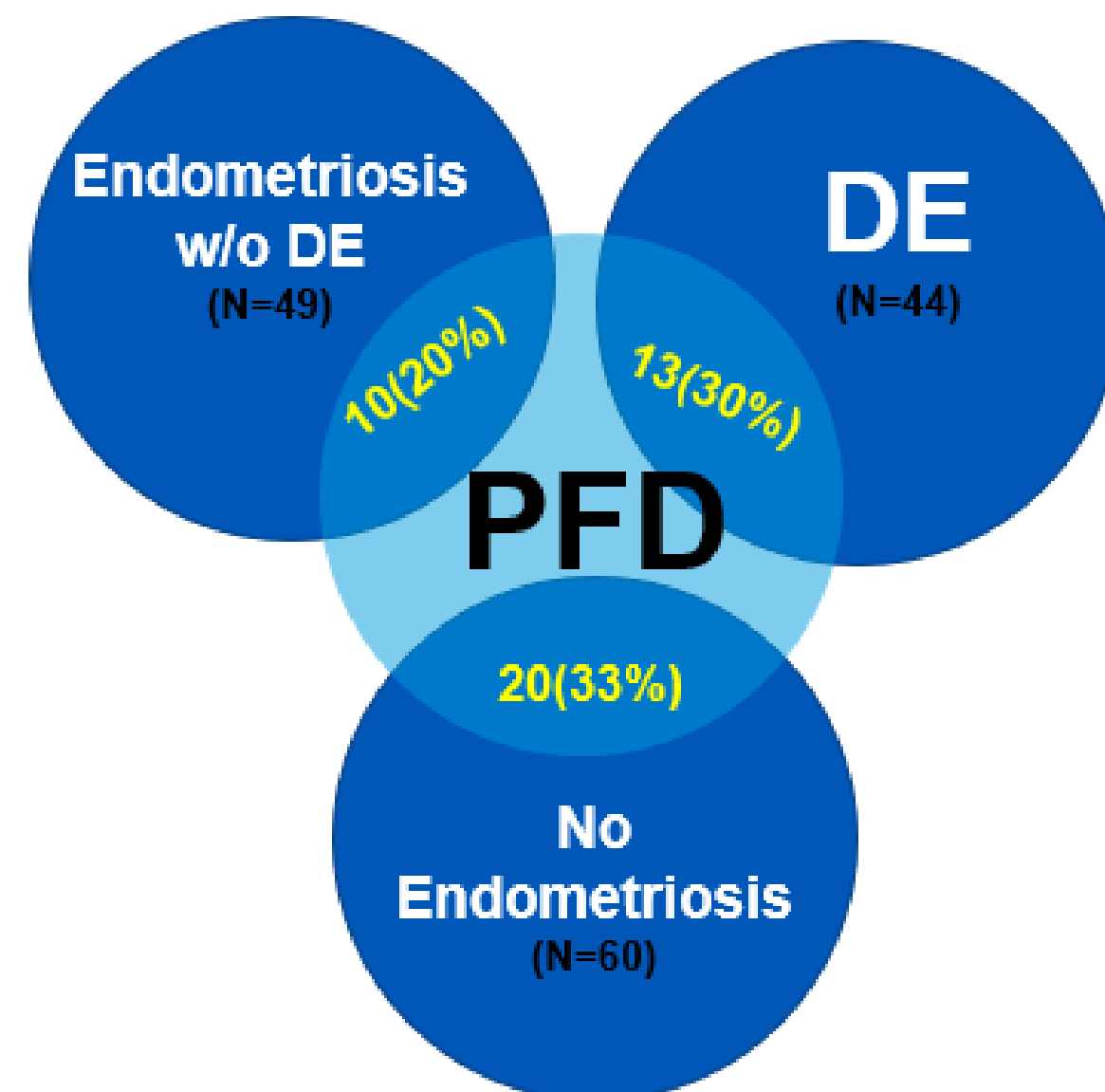


Table 1. Anorectal manometry with balloon expulsion tests.

Balloon Expulsion Test	Deep Endometriosis (n=4)	No Deep Endometriosis (n=4)	P-value
Failed Balloon Expulsion test	1 (25%)	4 (31%)	0.067
Anorectal Manometry Measure	Deep Endometriosis (n=4)	No Deep Endometriosis (n=13)	P-value
Mean sphincter pressure (Rest), mmHg (median)	99.25 (94.25; 108.5)	92.90 (84.3; 100.6)	0.3082
Max sphincter pressure (Squeeze), mmHg, (median, IQR)	195.3 (177.65; 228.35) 50.7 IQR	177.9 (146.3; 255.5) 109.2 IQR	0.5713
Rectoanal pressure differential, mmHg (median, IQR)	-55.75 (-81.45; -35.8) -45.65 IQR	-64.8 (-84.5; -48.7) -35.8 IQR	0.5713
First sensation, (median, IQR)	20 (20; 30) 10 IQR	20 (20; 40) 20 IQR	0.7767
Urge to defecate, (median, IQR)	40 (30; 65) 35 IQR	40 (40; 60) 20 IQR	0.6558
Discomfort (median, IQR)	75 (60; 120) 60 IQR	60 (60; 90) 30 IQR	0.4967

- 153 patients with MRIs (93 endometriosis, 44 DE)
- Of those with “baseline IBS”+DE, 37% (n=7/19) had RGV >900 m².
- Evaluation of 17 ARMs showed nonsignificant differences in patients with/without DE due to limited sample size (Table 1).

CONCLUSION

- **Historic diagnosis of IBS does not predict GI symptoms at time of endometriosis diagnosis.**
- **Pain improvement with defecation was significantly associated with higher likelihood of posterior DE.**
- **Similar % patients with DE and without endometriosis, had PFD with limited further evaluation suggesting underdiagnosis.**
- **On ARM, small signal to higher resting pressures and failed BET in DE, insignificant due to low power. Further studies needed.**

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