

Risk Factors and Clinical Characteristics of Rectal Prolapse in Young Patients

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Abstract

Background: Rectal prolapse is a relatively common condition in children and elderly patients but uncommon in young adults less than 30 years old. The aim of this study is to identify risk factors and characteristics of rectal prolapse in this group of young patients and determine surgical outcome.

Methods: Adult patients younger than 30 years old with rectal prolapse treated surgically between September 1994 and September 2012 were identified from an IRB approved database. Demographics, risk factors, associated conditions, clinical characteristics, surgical management and follow-up were recorded.

Results: Forty-four (females 32) patients were identified with a mean age of 23 years old. Eighteen (41%) had chronic psychiatric diseases requiring treatment and these patients experienced significantly more constipation than non-psychiatric patients (83% vs. 50%; $P=0.024$). Thirteen (30%) patients had previous pelvic surgery. The most common symptom at presentation was a prolapsed rectum in 40 (91%) and hematochezia in 24 (55%). Twenty-four (55%) underwent a laparoscopic rectopexy, 14 (32%) open abdominal repair, and 6 (14%) had perineal surgery. The most common procedure was resection rectopexy in 21 (48%; 7 open; 14 laparoscopic). At a median follow-up of 11 (range 1-165) months, 6 patients (14%) developed a recurrence; 3 (13%) after laparoscopic, 2(14%) after open abdominal and 1(17%) after perineal surgery.

Conclusions:

and Ehlers-Danlos syndrome (EDS). The diagnosis of RP was based on the surgeon viewing the RP or RP seen on radiographic evaluation. Recorded clinical characteristics included preoperative symptoms and examinations associated with RP. The extent of RP was divided as follows:

- as mild RP as mild RP
- as moderate RP as moderate RP
- as severe RP as severe RP

Factors	Total Population(N=44)
Chronic psychiatric diseases	18(41%)
Previous pelvic surgery	13(30%)
Redundant rectosigmoid colon	27(61%)
IBS	6(14%)
IBD or colitis	9(20%)
Family history of GI diseases	10(23%)
Family history of rectal prolapse	1(2%)
Obstetric history*	8(25%)
Medication history	
Psychiatric medication	19(43%)
Laxatives	16(36%)
Comorbidities	
Uterovaginal prolapse	4(9%)
Solitary rectal ulcer	10(23%)
Ehlers-Danlos syndrome	3(7%)
*Percentage based on 32 female patients	

Table 2 Risk factors of rectal prolapse

Factors	Patients with Psychiatric disease(N=18)	Patients without Psychiatric disease(N=26)	P value
Gender			
Male	3(17%)	9(35%)	
Female	15(83%)	17(65%)	0.303
Constipation	15(83%)	13(50%)	0.024
Defecatory straining or obstruction	16(89%)	18(69%)	0.161
Abdominal or anal pain	11(61%)	12(46%)	0.329
Blood discharge	12(67%)	12(46%)	0.179
Laxatives	10(56%)	6(23%)	0.028

Table 3 Characteristics in the patients with psychiatric disease

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diseases requiring medical treatment. These patients experienced significantly more constipation and needed more laxatives than non-psychiatric patients.

Of the 44 young patients, 61% were found intraoperatively to have a

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