

CASE REPORT

Rectal prolapse in a young adult male patient and its unique aetiology

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Introduction

Rectal prolapse is commonly seen at the extremes of age groups. In adults, it is almost exclusively seen in females. The aetiology of rectal prolapse in adult males is not completely understood. A case of rectal prolapse in a young adult male patient is presented and a likely unique aetiopathology is discussed.

Case history

A 39-year-old male Caucasian patient presented with a history of rectal-bleeding and faecal incontinence. The patient was previously healthy and had no relevant past-medical or surgical history. Specifically, there was no history of constipation, straining, chronic cough, psychiatric illness, rectal or pelvic trauma, sexual abuse or any familial bowel disease. He was a non-smoker. The patient had performed bodybuilding exercise for a period of 3 years. This involved performing a squat exercise with weights. The patient also had a history of anabolic androgenic steroid and growth hormone use 4 years previously.

On general examination the patient was found to be of average build and height. He was not anaemic. The systemic examination, which focused primarily on the abdominal examination, was normal. Rectal examination revealed poor anal tone that would easily admit 4 fingers, with a full thickness complete prolapse.

All blood tests were normal, in particular the haemoglobin. The chest X-ray was normal. Flexible sigmoidoscopy was performed to exclude an intussuscepting polyp or neoplasm, solitary ulcer or mucosal disease, and was found to be normal. Transrectal ultrasound showed a short anal canal, but no focal sphincteric defect. Pudendal nerve terminal motor latency is prolonged in incontinent patients, hence a nerve conduction study was done which showed only low borderline delay with terminal latency of the right and left pudendal nerves measuring 2.4 and 2.8 milliseconds respectively.

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The patient was offered a rectopexy procedure as a surgical cure for this condition. During surgery, the rectum was sutured to pre-sacral fascia with a mesh encircling half of its posterior circumference. The rectum and sigmoid were of normal length and calibre and the rectovesical pouch was deep. Postoperative recovery was uneventful.

Discussion

Incomplete prolapse is common in infant boys and complete prolapse is more common in elderly females.³ Rectal prolapse often occurs in children with chronic respiratory disease (such as cystic fibrosis), malnutrition and diarrhoeal disorders.³ In adulthood, rectal prolapse has the highest incidence in females (male/female ratio 1:4) due to laxity of the pelvic musculature, as a result of trauma sustained during vaginal delivery.³ However, nulliparous women are also at risk of developing idiopathic rectal prolapse.²

When young men develop a prolapse there is usually some underlying predisposing factor. Known causes of rectal prolapse in adult males are spinal cord injuries, peri-anal trauma, schistosomiasis-induced pelvic myopathy,¹ long redundant rectosigmoid colon^{4,5} intussusception and occult rectal prolapse syndrome.⁶ The aetiology of rectal prolapse in adult males is however still not fully understood.

This case of rectal prolapse presented was unusual with regard to the age group and gender of the patient. Investigations like sigmoidoscopy, trans-rectal ultrasound and pudendal nerve conduction study in this case did not reveal any mucosal disease or major structural abnormalities in anal sphincter/pelvic musculature. The only likely cause for the rectal prolapse would be heavy weight-lifting exercise over a period of time, probably involving the squatting exercise. There are no similar cases in the literature describing heavy exercise training as a risk factor for rectal prolapse.

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