“GRACILOPLASTY” IN TREATMENT OF RECURRENT COMPLETE RECTAL PROLAPSE: CASE REPORT

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SUMMARY

Gracilis muscle flap was used to treat a seven year old boy with a one year history of recurrent rectal prolapse. Initial perineal surgery in form of Thiersch stitch resulted into failure to control rectal prolapse and damage to anal sphincter. Graciloplasty corrected both problems.

INTRODUCTION

Numerous abdominal and perineal operations have been described for the treatment of complete rectal prolapse (1). A laparoscopic approach has also been described recently (2,3). The abdominal procedures are associated with erectile dysfunction in men and micturition disturbances in both genders (4,5) and the perineal procedures with a high recurrence rate and morbidity (2,6).

Graciloplasty technique avoids dissection in the retrorectal space, reducing likelihood of erectile or micturition dysfunction. This is a personal experience of a patient with recurrent complete rectal prolapse who had an accompanied complication of damaged anal sphincter. Graciloplasty was successfully applied in the treatment of this patient.

CASE REPORT

A seven year old boy was admitted at Mount Longonot Hospital, Naivasha on 5th September 2006, with a one year history of recurrent rectal prolapse. The prolapse would initially occur on hard stools but with time it became so frequent and would occur at every stool or on any form of straining. In the initial stages, it was possible to easily reduce the prolapsed rectum but gradually this became difficult due to swelling and bleeding from the rectal mucosa.

The child was taken to Narok District Hospital eight days from onset of the problem where a perineal procedure in form of Thiersch stitch was performed. There was initial control of the rectal prolapse but it was noted the child could not open bowels at regular intervals. An anal abscess developed which burst and started discharging pus. The stitch broke and extruded. Rectal prolapse recurred and now with stool incontinence. The child was discharged on saline baths, antibiotics, analgesics and haematinics. He later presented at Mount Longonot Hospital, with a complete rectal prolapse and stool incontinence.

On examination, the patient was in fair general condition, not pale, no lymphadenopathy and no dehydration. Examination of the respiratory, central nervous and cardiovascular systems was normal. However, the rectum was completely prolapsed, mildly oedematuns with patchy areas of petechial haemorrhage. The anal sphincter was patulous and the prolapsed rectum could be reduced with relative ease only to prolapse again.

An abdominal ultrasound was reported as normal. Haemogram done revealed a haemoglobin of 11.3g%, and WBC count 6000/cen³. Urinalysis was normal.

On 7th October 2006, a month after admission, a left graciloplasty was performed.
Figure 1
Patient in lithotomy and landmarks for left gracilis muscle marked

Figure 2
Distal end of left gracilis muscle dissected up to point of insertion

Figure 3
Left gracilis muscle already detached from point of insertion. Major vascular pedicle identified together with the nerve act as fulcrum to rotate and inset gracilis muscle around the anus

Figure 4
Gracilis muscle already wrapped around the anus. Note the slight bulge on left side at point of fulcrum

Figure 5
Two weeks after surgery both perianal and thigh wounds have healed.

The flap was successfully tunneled around the anus. Stitches from left thigh wounds were removed after ten days. Patient was started on sitz baths for the anal wound. A day after surgery and at the end of two weeks the wound had healed. He was started on perineal exercises by the hospital physiotherapist.

Patient was finally discharged from the hospital on 25th October 2006. Subsequent reviews at one month and later at two months revealed no recurrence of rectal prolapse and was continent of stool.

DISCUSSION

Several abdominal and perineal operations have been described for treatment of recurrent complete rectal prolapse (6,7).
Most of the abdominal and laparoscopic procedures involve dissection in the retrorectal space and thus disturb the mesorectum and the pelvic nerves. This dissection can lead to temporary or permanent erectile dysfunction or retrograde ejaculation in 3% to 5% of men (5). Sexual dysfunction is more frequent with laparoscopic mesorectal dissection than with open surgery (49% versus 4%) (8). Micturition disturbances do occur in both genders (4, 5). Even rectal mobilisation without resection or rectopexy, which has low recurrence rate, also involves retrorectal dissection (9).

Devadhar’s procedure that involves placing longitudinal placating seromuscular sutures on the anterior and lateral surfaces of the rectum, excision of peritoneum in pouch of Douglas, followed by reperitonealisation of rectum prevents recurrence of rectal prolapse and avoids dissection in the retrorectal space (1).

Graciloplasty in treatment of rectal prolapse is one of the perineal surgical procedures available that could be used in those patients not keen on abdominal operations or their general state precludes them. In versatile and familiar hands, graciloplasty is a simple and easy procedure whose operative time is between 40-60 minutes. In this patient, the operative time was 50 minutes.

Laparoscopic procedures have a higher morbidity rate (24%) than that observed in patients who undergo Devadhar’s technique (10). Perineal operations are associated with high recurrence rates of 8% to 30% and a high operative morbidity (2, 7, 11). In this patient, complete healing of both perineal and thigh wounds occurred in two weeks. A five month follow-up period has not shown recurrence or rectal prolapse.

In conclusion, graciloplasty is an additional technique that can be used in treatment of recurrent complete rectal prolapse and is devoid of the common complication of erectile dysfunction and micturition disturbances.

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REFERENCES