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A PROSPECTIVE OBSERVATIONAL STUDY OF EARLY COMPLICATIONS OF TRANSANAL SUTURE RECTOPEXY (TSR) IN RECTAL PROLAPSE

Medical Science

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ABSTRACT

Background: Rectal prolapse is a distressing condition associated with significant morbidity and impaired quality of life. Transanal Suture Rectopexy (TSR) is a minimally invasive technique frequently employed for its correction, especially in patients unfit for abdominal procedures. This study aimed to evaluate the early postoperative complications and outcomes following TSR in patients with rectal prolapse. **Methods:** This prospective observational study was conducted over 18 months at a tertiary care hospital in Surat, India. Twenty patients diagnosed with full-thickness rectal prolapse underwent TSR and were followed for three months postoperatively. Data on demographics, clinical features, operative time, and early postoperative complications were analyzed using descriptive statistics and chi-square tests, with $p < 0.05$ considered statistically significant. **Results:** The majority of patients (60%) were between 41–60 years of age, with a male predominance (70%). The most common preoperative symptom was chronic constipation (55%). The mean operative time was 61–120 minutes in 85% of cases. Early complications included altered bowel habits (35%), fecal incontinence (25%), hematoma (25%), and pelvic pain (15%). Most patients resumed bowel activity by postoperative day three, and oral feeding within 24 hours. No major morbidity or mortality occurred during the study period. **Conclusion:** TSR is a safe, effective, and technically straightforward procedure for rectal prolapse, associated with minimal morbidity and early recovery. Early complications are generally mild and self-limiting. It represents a reliable option for patients unsuitable for abdominal approaches, particularly in resource-limited settings.

KEYWORDS

Transanal suture rectopexy, rectal prolapse, postoperative complications, fecal incontinence, minimally invasive surgery.

INTRODUCTION

Rectal prolapse involves full-thickness protrusion of the rectal wall through the anal canal. It affects both adults and children, with multifactorial etiology including chronic constipation, pelvic floor weakness, and straining. Although not life-threatening, it severely affects the patient's quality of life through pain, bleeding, and incontinence. Multiple surgical procedures have been described for its correction, varying from abdominal to perineal approaches. Transanal Suture Rectopexy (TSR) is a minimally invasive perineal operation that avoids the risks of laparotomy and general anesthesia, making it suitable for elderly or high-risk patients. This study was undertaken to assess early postoperative complications and outcomes following TSR.

MATERIALS AND METHODS

This prospective observational study was conducted in the Department of General Surgery at SMIMER Hospital, Surat, over 18 months. Twenty consecutive adult patients with full-thickness rectal prolapse (<10 cm) who underwent TSR were included after informed consent. Patients with rectal malignancy, inflammatory bowel disease, mucosal prolapse, or prolapse >10 cm were excluded.

Data on demographic characteristics, clinical presentation, operative findings, and early postoperative outcomes were collected using a structured proforma. All patients underwent TSR under spinal or general anesthesia. Postoperatively, patients were monitored for pain, bowel function, wound healing, and complications such as bleeding, incontinence, or recurrence. Statistical analysis was performed using Jamovi software version 7.2.1. Descriptive statistics and chi-square tests were applied; $p < 0.05$ was considered significant.

RESULTS

A total of 20 patients were included. The mean age was 46 years, with 70% males. Chronic constipation was the most common presenting symptom (55%). The majority of prolapses measured 7–10 cm in length (65%). Operative time ranged from 61–90 minutes in 50% and 91–120 minutes in 35%.

Early postoperative complications included altered bowel habits (35%), fecal incontinence (25%), hematoma (25%), and pelvic pain (15%). Most patients resumed bowel activity within 2–3 days and oral intake within 24 hours. There were no major complications, reoperations, or mortality during follow-up. The overall hospital stay averaged 3.5 days.

DISCUSSION

The present study confirms that TSR is a safe and effective method for treating full-thickness rectal prolapse. The majority of patients in this study were middle-aged males, similar to findings reported by Chivate et al. (2020) and Prasad et al. (2018). The observed complication rate was low, and no major morbidity was noted.

Constipation and altered bowel habits were the most frequent complications, consistent with previous studies. These are often transient and related to postoperative anorectal motility adjustments. Fecal incontinence, observed in 25% of cases, was generally mild and improved with time and physiotherapy. No recurrences were detected during the 3-month follow-up, indicating durable short-term outcomes.

Compared to abdominal rectopexy, TSR has the advantage of being less invasive, requiring shorter operative time, and involving minimal blood loss. The absence of mesh eliminates foreign-body complications. However, recurrence and persistent functional symptoms remain potential long-term issues, warranting extended follow-up.

CONCLUSION

Transanal Suture Rectopexy is a simple, cost-effective, and safe surgical technique for rectal prolapse, especially suitable for patients unfit for abdominal procedures. It offers low complication rates, early recovery, and satisfactory short-term results. Larger multicentric studies with longer follow-up are recommended to evaluate recurrence and long-term functional outcomes.

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