



vCOMPARATIVE STUDY OF LASER HAEMORRHOIDOTOMY AND STAPLER HEMORRHOIDOPEXY AT TERTIARY CARE CENTRE

General Surgery

Dr. Susmitha

MBBS, MS General Surgery

ABSTRACT

Background: Haemorrhoidal disease is a common anorectal condition that significantly affects quality of life. Minimally invasive procedures such as laser haemorrhoidotomy and stapler hemorrhoidectomy are increasingly preferred because of reduced postoperative morbidity and faster recovery. This study compared the clinical outcomes of both techniques in patients treated at a tertiary care centre. **OBJECTIVES** To compare the operative time between laser haemorrhoidotomy and stapler hemorrhoidectomy. To evaluate and compare postoperative pain in patients undergoing laser haemorrhoidotomy and stapler hemorrhoidectomy. To compare intraoperative and postoperative complications associated with both procedures. To assess the duration of hospital, stay in both groups. To evaluate the time taken for return to normal daily activities in both procedures. To compare the effectiveness of both procedures in terms of symptom relief and recurrence. **Methods:** A comparative observational study was conducted among 50 patients with hemorrhoidal disease, equally divided into stapler hemorrhoidectomy (n=25) and laser haemorrhoidectomy (n=25) groups. Demographic characteristics, postoperative complications, quality of life (QoL), and follow-up outcomes were evaluated. Statistical analysis was performed using appropriate tests, and p-values <0.05 were considered statistically significant. **Results:** The mean age of participants was 46.76 ± 13.22 years, with most patients belonging to the 40–60 years age group (60%). Males predominated in both groups (74%). Postoperative bleeding was significantly higher in the laser group (80.0%) compared to the stapler group (48.0%) ($p=0.01$), whereas urinary retention was more frequent in the stapler group (44.0% vs 20.0%) though statistically insignificant ($p=0.06$). Quality of life outcomes showed significant improvement in the laser group, where 100% of patients reported excellent QoL compared to 0% in the stapler group ($p=0.001$). Follow-up assessment demonstrated complete healing without recurrence in all laser patients (100%), while all stapler patients experienced occasional discomfort despite healing ($p<0.001$).

KEYWORDS

INTRODUCTION:

Hemorrhoidal disease is a common anorectal condition that significantly affects quality of life. Minimally invasive procedures such as laser haemorrhoidotomy and stapler hemorrhoidectomy are increasingly preferred because of reduced postoperative morbidity and faster recovery. This study compared the clinical outcomes of both techniques in patients treated at a tertiary care centre.

METHODS:

Design: Comparative Observational Study

Setting: Department of General Surgery, SBKS Medical Institute and Research Centre

Participants: 50 patients with haemorrhoidal disease

Intervention: Patients were divided into stapler hemorrhoidectomy (n=25) and laser haemorrhoidectomy (n=25) groups.

Outcome: Demographic characteristics, postoperative complications, quality of life (QoL), and follow-up outcomes were evaluated.

Analysis: Descriptive statistics

RESULTS:

Demographics: Mean age was 46 years with patients more in age group of 40-60 years

Diagnosis: Hemorrhoidal disease

Procedure: stapler hemorrhoidectomy and laser haemorrhoidectomy

Complications: Post Operative bleeding higher in laser haemorrhoidectomy Urinary retention more in stapler hemorrhoidectomy group of patients

Recovery: All individuals in the laser haemorrhoidectomy group stated excellent QoL (100.0%)

DISCUSSION:

Our findings corroborate prior studies demonstrating laser hemorrhoidectomy in hemorrhoidal diseases. Eskandaras MS et al. reported fastest return to daily activity in the laser hemorrhoidoplasty group at 11.3 ± 2.4 days, compared with stapler hemorrhoidectomy at 17.2 ± 4.5 days and Milligan–Morgan hemorrhoidectomy at 26.2 ± 4.3 days Majumder KR et al. concluded that laser haemorrhoidoplasty resulted in faster recovery, with shorter hospital stay of 18.36 hours

compared with 28.40 hours in the stapler group ($p < 0.05$) Despite encouraging results postoperative bleeding was seen more in laser haemorrhoidectomy group of patients.

CONCLUSION:

Laser haemorrhoidectomy demonstrated superior patient-reported outcomes, better quality of life, and improved follow-up recovery compared to stapler hemorrhoidectomy, suggesting it may be a preferable minimally invasive option for hemorrhoidal disease management.

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