



ORIGINAL RESEARCH PAPER

General Surgery

CASE STUDY OUTCOMES OF CHIVATE'S SUTURE HEMORRHOIDOPEXY FOR INTERNAL HEMORRHOIDS: A PROSPECTIVE CASE SERIES FROM A TERTIARY CARE CENTER

KEY WORDS: Internal hemorrhoids, Chivate's suture hemorrhoidoexy, minimally invasive proctology, hemorrhoidoexy, short-term outcome, case series.

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BACKGROUND
 Hemorrhoidal disease is one of the most frequent benign anorectal conditions encountered in surgical practice. [1,2] Although conventional hemorrhoidectomy remains effective, it is associated with significant postoperative pain, bleeding, and delayed recovery. [3,4] Chivate's Suture Hemorrhoidoexy (CSH) is a minimally invasive alternative designed to reposition the prolapsed hemorrhoidal tissue while preserving the anoderm and mucocutaneous junction, thereby reducing postoperative morbidity. [5,6] This study presents a case series evaluating the feasibility, safety, and short-term outcomes of CSH in patients with Grade II and III internal hemorrhoids.

METHODS
 A prospective case series was conducted in the Department of General Surgery, Government Medical College and New Civil Hospital, Surat, between February 2024 and November 2025. A total of six patients (3 males, 3 females; mean age 57.8 years, range 35–74 years) with Grade II–III internal hemorrhoids underwent Chivate's Suture Hemorrhoidoexy under spinal anesthesia.

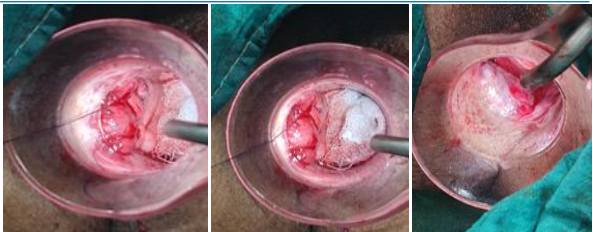
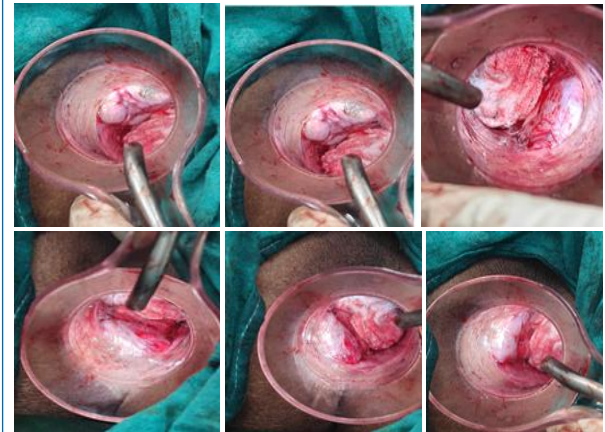
Inclusion Criteria:

- Patients diagnosed clinically with Grade II or III internal hemorrhoids.
- Age between 18–80 years.
- Fit for spinal anesthesia.
- Willingness for follow-up and informed consent obtained.

Exclusion Criteria:

- Presence of external hemorrhoids, or fistula-in-ano.
- Coagulopathy or immunocompromised state (except one stable HIV-positive patient).
- Previous anorectal surgery.
- Associated malignancy or inflammatory bowel disease.

Intra Operative :



All patients were operated using a standard CSH technique using continuous circumferential double interlocking Vicryl 2-0 sutures taken 2–4 cm above the dentate line. Postoperative evaluation included pain assessment, bleeding, recurrence, prolapse, stenosis, and return to normal activity.

RESULTS:

- All six patients successfully underwent the procedure.
- No intraoperative or postoperative bleeding occurred.
- No recurrence, prolapse, or anal stenosis was observed during the follow-up period (up to 3 months).
- Mild postoperative pain for 2–3 days was noted in one patient who underwent combined lateral internal sphincterotomy.
- No wound infection or discharge was recorded.
- Mean hospital stay: 3.2 days.
- Return to normal activity: within 5–7 days for all patients.

CONCLUSION:
 Chivate's Suture Hemorrhoidoexy is a safe, minimally invasive, and cost-effective alternative for managing Grade II and III internal hemorrhoids. The absence of postoperative bleeding, recurrence, or prolapse, coupled with minimal pain and rapid recovery, demonstrates its promising potential as a substitute for conventional hemorrhoidectomy. Larger randomized studies with longer follow-up are recommended to validate its long-term efficacy.

DISCUSSION:
 Hemorrhoidal disease is one of the most common benign anorectal disorders requiring surgical intervention. Although conventional excisional hemorrhoidectomy (Milligan-Morgan or Ferguson) remains the standard treatment for advanced hemorrhoids, it is frequently associated with considerable postoperative pain, bleeding, delayed wound healing, and prolonged recovery, prompting the development of minimally invasive alternatives such as stapled hemorrhoidoexy, Doppler-guided hemorrhoidal artery ligation, and suture hemorrhoidoexy. [1–4]

Chivate's Suture Hemorrhoidoexy (CSH) is a non-excisional procedure that corrects hemorrhoidal prolapse by circumferential mucosal plication above the dentate line while preserving the sensitive anoderm. This principle minimizes tissue trauma and postoperative pain while restoring the normal anatomical position of the hemorrhoidal cushions. The

technique described by Chivate et al. has demonstrated favorable outcomes with minimal postoperative complications and good patient satisfaction. [5,6]

In the present prospective case series, all six patients successfully underwent CSH without any intraoperative or postoperative bleeding. None of the patients developed recurrence, persistent prolapse, or anal stenosis during the three-month follow-up. These findings are comparable to those reported by Chivate et al., who observed excellent control of prolapse with a very low incidence of postoperative bleeding and recurrence following transanal suture mucopexy. [5,6]

Postoperative pain was minimal in our series, with only one patient experiencing mild pain for 2–3 days following a concomitant lateral internal sphincterotomy. This observation supports previous studies showing that preservation of the anoderm and avoidance of excisional wounds significantly reduce postoperative pain compared with conventional hemorrhoidectomy. [3,5,7]

The mean hospital stay in our study was 3.2 days, and all patients resumed normal daily activities within 5–7 days. These findings are consistent with previous reports demonstrating faster recovery, shorter hospitalization, and earlier return to work following suture hemorrhoidopexy compared with conventional excisional procedures. [5–8]

No patient in our series developed wound infection, anal discharge, or anal stenosis. Preservation of the anal canal anatomy and the absence of open wounds probably contribute to the lower incidence of postoperative complications. Similar findings have been reported by Chivate et al. and other authors evaluating minimally invasive hemorrhoidal procedures. [5–8]

The major limitation of the present study is the small sample size and relatively short follow-up period of three months. Although the short-term outcomes are encouraging, larger prospective randomized controlled trials comparing Chivate's Suture Hemorrhoidopexy with conventional hemorrhoidectomy and other minimally invasive procedures are required to establish its long-term efficacy and recurrence rates. [8,9]

Overall, the findings of this study suggest that Chivate's Suture Hemorrhoidopexy is a safe, feasible, minimally invasive, and cost-effective procedure for Grade II and Grade III internal hemorrhoids, providing excellent short-term outcomes with minimal postoperative pain, negligible complications, and rapid recovery.

REFERENCES:

1. Lohsiriwat V. Hemorrhoids: From basic pathophysiology to clinical management. *World J Gastroenterol.* 2012;18(17):2009-2017.
2. Loder PB, Kamm MA, Nicholls RJ, Phillips RKS. Haemorrhoids: Pathology, pathophysiology and aetiology. *Br J Surg.* 1994;81:946-954.
3. Milligan ETC, Morgan CN, Jones LE, Officer R. Surgical anatomy of the anal canal and operative treatment of haemorrhoids. *Lancet.* 1937;230:1119-1124.
4. Ferguson JA, Heaton JR. Closed hemorrhoidectomy. *Dis Colon Rectum.* 1959;2:176-179.
5. Chivate SD, Ladukar L, Ayyar M, Mahajan V, Kavathe S. Transanal Suture Rectopexy for Haemorrhoids: Chivate's painless cure for piles. *Indian J Surg.* 2012;74(5):412-417.
6. Chivate SD, Killedar MM, Ladukar LD, et al. Transanal Suture Mucopexy for Hemorrhoids. *Dis Colon Rectum.* 2022;65(5):742-749.
7. Longo A. Treatment of hemorrhoidal disease by reduction of mucosa and hemorrhoidal prolapse with a circular stapling device. *Proceedings of the 6th World Congress of Endoscopic Surgery.* Rome; 1998.
8. Shanmugam SAS. Outcome of Chivate's transanal suture mucopexy procedure for haemorrhoids: Primary findings in South Indian population. *Int Surg J.* 2023;10(9):1507-1511.
9. Paquette IM, Johnson EK, et al. Clinical Practice Guidelines for the Management of Hemorrhoids. *Dis Colon Rectum.* 2024.