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John McConnell MD

Indru Khubchandani MD
Lehigh Valley Health Network, Indru.Khubchandani@lvhn.org

Published In/Presented At

McConnell, J. C., & Khubchandani, I. T. (1983). Long-term follow-up of closed hemorrhoidectomy. *Diseases of the colon and rectum*, *26*(12), 797–799. https://doi.org/10.1007/BF02554754

Long-term Follow-up of Closed Hemorrhoidectomy

JOHN C. MCCONNELL, M.D., INDRU T. KHUBCHANDANI, M.D.

McConnell JC, Khubchandani IT. Long-term follow-up of closed hemorrhoidectomy. Dis Colon Rectum 1983;26:797-799.

Four hundred forty-one patients who had closed hemorrhoidectomy with local anesthesia were followed for one to seven years postoperatively to assess long-term results and patient satisfaction. Seven and one-half per cent needed further treatment of hemorrhoids, 7.7 per cent developed other anorectal or colonic pathology, and 0.5 per cent had lasting incontinence. Lateral internal sphincterotomy did not predispose to incontinence. Patient satisfaction was 92.6 per cent. [Key words: Hemorrhoidectomy, closed; Follow-up, Sphincterotomy; Incontinence]

THERE ARE FEW STUDIES in the medical literature evaluating the long-term results of closed hemorrhoidectomy.[1,2] We have used the closed technique of hemorrhoidectomy, employing 5-0 polyglycolic acid suture with local anesthesia, since 1972.[3,4] The purpose of this research was to assess retrospectively the results of this technique.

Materials and Methods

Hospital and office records of patients undergoing only hemorrhoidectomy from 1972 to 1979 were reviewed, giving us a one-to-seven-year follow-up. The study sample was comprised of every fifth patient in chronologic order, for the authors' convenience. Patients with associated anorectal pathology (*e.g.*, fissures) were excluded. Age, sex, early and late complications, and subsequently developing anorectal or colonic pathology were studied. We were interested especially in whether subsequent surgery was needed, incontinence problems, and patient satisfaction with surgical results. An indirect evaluation of the merits of yearly follow-up of posthemorrhoidectomy patients was thus obtained. Questionnaires were mailed to patients with incomplete follow-up (Table 1).

Five hundred eighty-two charts were reviewed. All patients had immediate postoperative follow-up, and 291 patients were followed in the office at least yearly with an interval history, anoscopy, stool hematest, and sigmoidoscopy without preparation. The remaining 291 patients who were not examined annually received the questionnaire. One hundred-fifty replied, resulting in 441 patients suitable for this study.

Results

Of the 582 patients, 56 per cent were male. Ages ranged from 16 to 82 years, with 64 per cent between the ages of 31 and 60. All patients had hemorrhoidectomy in three or more quadrants using the technique described. Two hundred eleven patients (36.3 per cent) had partial lateral internal sphincterotomy performed at the time of hemorrhoidectomy. Early complications in 582 patients were not remarkably different from previous reports[1,3-5] (Table 2). Wound dehiscence occurred in 15 (2.6 per cent), so primary healing occurred in 97.4 per cent.

There were four deaths during the follow-up period; none were related to surgery. Expired patients were excluded unless they had been followed longer than four years.

Of the 441 patients followed one to seven years, 34 (7.7 per cent) developed significant anorectal or colonic pathology. Polyps (2.9 per cent) and fissures (1.6 per cent) were most common. Two carcinomas (0.4 per cent) developed (Table 3).

Thirty-three (7.5 per cent) had treatment for residual hemorrhoid problems. One required repeat hemorrhoidectomy (Table 4).

From the Division of Colon and Rectal Surgery, Allentown Affiliated Hospitals, Allentown, Pennsylvania

Read at the meeting of The American Society of Colon and Rectal Surgeons, Colorado Springs, Colorado, June 7 to 11, 1981.

Address reprint requests to Dr. Khubchandani: Little Lehigh Medical Center, 1275 South Cedar Crest Boulevard, Allentown, Pennsylvania 18103.

TABLE 1. *The Follow-up Questionnaire*

We are conducting a study to determine the outcome for our patients who had surgery for hemorrhoids. Our records for you are incomplete. Would you please answer the following questions and return the questionnaire to us? All information is confidential.

1. Are you satisfied with the results of your operation? Yes _____ No _____
2. Have you required any surgery since your hemorrhoid operation? Yes _____ No _____
3. If yes to Question No. 2, please give us the type and date of operation if possible. We are especially interested in surgery of the anal and rectal area but would like to know about all operations.
4. Have you had any office procedures done for anal or rectal problems? Yes _____ No _____
5. If yes to Question 4, what type and when?
6. Do you have any of the following symptoms now:

	None	Mild	Moderate	Severe	Present before surgery: Yes	Present before surgery: No
Bleeding						
Pain						
Constipation						
Diarrhea						
Itch						
Protrusion						

7. Do you have loss of control of your bowels? Sometimes _____ Always _____ Never _____
8. Do you have seepage or soiling? Yes _____ No _____
   If yes, do you wear a pad or cotton? Sometimes _____ Always _____ Never _____
9. Do you have loss of control of gas? Sometimes _____ Always _____ Never _____
10. Would you recommend the operation to someone with hemorrhoid problems? Yes _____ No _____

Complaints possibly related to surgery occurred in 54 (12.3 per cent). Most of these complaints were present prior to hemorrhoidectomy and were improved after surgery. In no case were the complaints noticeably worse (Table 5).

Special attention was given to temporary postoperative incontinence, defined as loss of control of gas or stool, or seepage from the anus. One or more problems occurred in 57 patients (12.9 per cent). Of the 211 patients who underwent internal sphincterotomy, 17 (8.1 per cent) experienced incontinence, as compared with 17.4 per cent of the other patients ($Chi^2 = 7.11; df = 1; P < .01$). Three of these patients reported frequent or permanent problems; of those, one wore a pad to prevent soiling.

Patient dissatisfaction was mentioned so infrequently in the office records that only the 150 questionnaire responses were used to assess this. Eleven patients of 150 (7.3 per cent) were not satisfied and seven (4.7 per cent) would not recommend the procedure. In most cases, recurrence of the presenting complaint was the principal reason for dissatisfaction.

TABLE 2. *Early Postoperative Complications*

Complications	Patients: Number	Patients: Per Cent
Wound dehiscence	15	2.6
Bleeding	8	1.4
Fecal impaction	2	.3
Prolonged urinary retention	1	.2
Pneumothorax	1	.2

Discussion

In the one-to-seven-year follow-up, 7.9 per cent of the patients developed anorectal or colonic pathology. The 2.9 per cent prevalence of polyps is similar to the occurrence of polyps in the general population.[6] The 0.4 per cent prevalence of carcinoma in asymptomatic patients seems higher than would be expected, but the number of patients is too small to generate a statistically reliable index. We believe, however, that continued follow-up of the hemorrhoidectomy patients is indicated, because of the possibility of associated anorectal and colonic prob-

TABLE 3. *Anorectal and Colonic Pathology Found on Follow-up*

Pathology	Patients: Number	Patients: Per Cent
Polyps	13	2.9
Fissures	7	1.6
Fistulas	5	1.1
Abscess	3	0.7
Carcinoma	2	0.4
Inflammatory disease	1	0.4
Anal stenosis	2	0.2
Perforated diverticulitis	1	0.2

TABLE 4. *Treatment of Residual Hemorrhoid Problems*

Treatment	Patients	
	Number	Per Cent
Rubber band ligation and/or injection	24	5.5
Excision of thrombotic hemorrhoid	4	0.9
Hemorrhoidectomy	1	0.2
Medical management	4	0.9
TOTAL	33	7.5

TABLE 5. *Postoperative Symptoms*

Symptom	Patients		Number with preoperative symptoms
	Number	Per Cent	
Pruritus	27	6.1	20
Bleeding	11	2.5	3
Pain	6	1.4	3
Diarrhea	6	1.4	4
Protrusion	4	.9	4
TOTAL	54	12.3	34

lems that develop later. Although all three patients who had lasting incontinence (0.5 per cent) had sphincterotomy performed, the difference was not statistically significant. The authors continue to perform sphincterotomy routinely in order to facilitate wound closure without tension, decrease postoperative spasm and pain, and most importantly, to divide the submucosal fibrotic pecten band.

Postoperative pain has been a major deterrent to acceptance of excisional hemorrhoidectomy. Various alternatives, such as rubber band ligation as an ambulatory office procedure, are available. Certain prolapsing advanced internal and external hemorrhoids are, however, best suited for surgical excision. Use of local anesthesia, closure of the wound using fine suture material, and minimal trauma to the perianal tissue minimize postoperative discomfort and complications. We have previously reported minimal wound infection and low urinary retention.

Conclusion

Closed hemorrhoidectomy with local anesthesia has satisfactory long-term postoperative results in 92.6 per cent of cases. Follow-up of asymptomatic posthemorrhoidectomy patients at yearly intervals is justifiable on the basis of yield of anorectal and colonic pathology, including 0.4 per cent incidence of carcinoma.

Acknowledgment

The authors wish to thank the Dorothy Rider Pool Health Care Trust for support in preparation of this report.

References

1. Ferguson JA, Mazier WP, Ganchrow MJ, Friend WG. The closed technique of hemorrhoidectomy. Surgery 1971;70:480-4.
2. Ganchrow MJ, Mazier WP, Friend WG, Ferguson JA. Hemorhoidectomy revisited: a computer analysis of 2,038 cases. Dis Colon Rectum 1971;14:128-33.
3. Khubchandani IT, Trimpi HD, Sheets JA. Closed hemorrhoidectomy with local anesthesia. Surg Gynecol Obstet 1972;135:955-7.
4. Khubchandani IT, Trimpi HD, Sheets JA. Evaluation of polyglycolic acid suture vs. catgut in closed hemorrhoidectomy with local anesthesia. South Med J 1974;67:1504-6.
5. Buls JG, Goldberg SM. Modern management of hemorrhoids. Surg Clin North Am 1978;58.3:469-78.
6. Goligher JC. Surgery of the anus, rectum and colon. 4th ed. London: Bailliere Tindall, 1980.