Research Paper

Volume : 5 | Issue : 6 | June 2016 • ISSN No 2277 - 8179 | IF : 3.508 | IC Value : 69.48

Post Operative Complications After Anal Surgery in Cases of Haemorrhoidectomy, Lis (Lateral Internal Sphincterotomy), and Anal Fistulas

Medical Science

KEYWORDS : Haemorrhoids, fistula, fissure, bleeding.

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ABSTRACT

This prospective study was conducted in the department of surgery for a period of one year September 2014 to August 2015. All patients who underwent anal surgery for haemorrhoids, anal fistula and fissure were included in the study. Patients who were very sick or bed ridden or suffering from other comorbidity where not included in the study. Patients in the study were between the age group of 16 to 85 years . Out of these 55 patients were male and 12 were female. These patients came to the surgical outpatient department or were admitted through emergency department . Most common complaint in our series was bleeding per rectum followed by pain and difficulty in defaecation.

Introduction

The most common complaints of patients who presented to our outpatient department were of bleeding per rectum , pain and difficulty in defecation. These patients were suffering from either fistula in ano or haemorroids or had fissure in ano. Within the anal canal , the haemorroidal pillars contribute to continence by functioning as submucosal anal cushions, accounting for about 15% of anal resting pressure (1). The pathological term hemorrhoid is used to describe the downward displacement of the cushion along with dilation of the contained sinusoids and sometimes bleeding from arterial,venous , or sinusoidal portions (2).Internal hemorrhoids are the anal cushions defined by their original internal location- above the dentate line , thus covered with the epithelium of transitional zone – that are prolapsing and/ or bleeding (3). Anal fistula (fistula in ano) results when an anorectal abscess that is spontaneously or surgically drained does not heal completely , becoming instead an inflammatory tract with an internal opening in the anal canal and an external opening on the skin. Anal fissure is an ulcer in the lower anal canal and it may be an acute or chronic. Also anal fissure may be primary or secondary depending upon whether it is without association to other local / systemic disease or secondary to some other disease like crohn's disease or ulcerative colitis. Haemorrhoids are treated by surgical and non-surgical interventions. The non-surgical interventions treat the haemorroids at the level above the pectineal line, an endodermic region without cerebrospinal or reflexive innervation and donot cause pain. They include sclerotherapy (4), rubber band ligation (4, 5), macro rubber band ligation (4), photocoagulation (4), cryotherapy (4) and doppler-guided haemorrhoidal artery ligation (4). In our study the focus was on complications after surgical interventions. Also were included the patients who were suffering from anal fissure and fistula in ano. The techniques used for haemorrhoidal disease was open technique of Milligan-Morgan (6) and its variations (4, 7-11). Reduction of anal pressure by sphincterotomy improves anodermal blood flow, resulting in fissure healing (12). lateral sphincterotomy was done for anal fissure ; and excision of fistula , deroofing the tract and allowing it to heal by secondary intention was done for fistula in ano.

Material and Methods

All patients were studied in the department of surgery of Panjab institute of Medical sciences Jalandhar. Patients attending the surgical outpatient department and those admitted from the emergency department were included in the study during the period from September 2014 to August 2015. The age of the patients in this study was between 16 years and 85years.Out of these patients 12 were females while 55 were males with a female male ratio of 18:82. The presenting complaints were (i)painless bleeding per rectum,(ii) painful defecation and (iii) recurrent attacks of discharge (frequently painful) from the perianal region. A detailed history was taken from all the patients and thorough general physical examination including local examination was conducted. Digital per rectal examination and proctoscopy, where needed, was done. Where surgery was required, the patients were admitted in the ward after due consent. In the ward all necessary investigations were done to assess the fitness of the patient for surgery. Three patients who were anaemic due to rectal bleeding received blood transfusion. After investigations all the patients underwent pre anesthetic checkup for fitness. On the evening of surgery patients were given light diet and laxatives. On the morning of surgery an enema was given around 7am followed by bowel wash after two hours. After the bowel wash patients were shifted to theatre. All patients received regional anesthesia. The surgery were performed in lithotomy position after cleaning and draping the area. For Haemorrhoidectomy open technique of Milligan –Morgan (6) and its variations (4,7-11)was only practiced, for anal fissure left lateral sphincterotomy was done after given an incision at the mucocutaneous junction and raising the mucosal flap. For anal fistula the tract was completely excised and before giving incision the tract was injected with methylene blue and hydrogen peroxide through a infant feeding tube. After excising the fistula it was de-roofed by incising tissues over it and laying open the wound allowing it to heal by secondary intention. After surgery wound was packed with liquid paraffin gauze. Post operatively the patient was kept on intravenous drip for six hours and oral liquids were allowed, soft diet was started after 12 hours and normal diet after 24hours. Oral laxative containing liquid paraffin and isghagol was started when the patient

started oral feed. The patients were discharged after they had passed stools and all patients were advised regular sitz bath. Oral antibiotics and analgesics were continued for 5 days.

Table 1.Sex ratio of patients of Haemorroids

Male	Female	Total	Male/Female ratio
19	05	24	79.2:20.8

Table 2.Sex ratio of patients of Fistula in ano

Male	Female	Total	Male/Female ratio
35	03	38	92.1:7.9

Table 3. Sex ratio of patients of anal fissure

Male	Female	Total	Male/Female ratio
01	04	05	20:80

Table 4. showing age incidence of Haemorroids

S.No	Age in Years	Number of patients		
		Male	Female	Total
01.	20 to 29	02	00	02
02.	30 to 39	06	01	07
03.	40 to 49	02	01	03
04.	50 to 59	03	03	06
05.	60 to 69	02	00	02
06.	70 to 79	01	00	01
07.	80 to 85	03	00	03
08.	Total (20 to 85)	19	05	24

Table 5. showing age incidence Fistula in ano

01 .	20 to 29	05	02	07
02.	30 to 39	11	00	11
03.	40 to 49	15	01	16
04.	50 to 59	03	00	03
05.	60 to 62	01	00	01
06.	Total (20 to 62)	35	03	38

Table 6. Showing age incidence of anal fissure

01.	26 to 33	01	04	05

Results

In our study during the period Sept.14 to Aug.15 a total of 180 patients visited the hospital for various ailments related to anal canal and peri-anal region and these patients were suffering from haemorroids, fistula in ano or anal fissure. Their main complaints were bleeding per rectum during defaecation and or difficult/ painful defaecation and constipation. Out of these 67 were selected for surgery. Males outnumbered females with males numbering 55 against 12 females. 24 patients were diagnosed to be suffering from haemorroids with 19 males and 5 females ; 38 patients were having fistula in ano amongst whom 35 were males and 3 females while 5 had anal fissure with 1 male and 4 females. Out of 24 patients of haemorroids seven patients were in the age group of 30 to 39 years and six were in the age group of 50 to 59 years. Only one patient was above 70 years of age. Amongst those suffering from fistula in ano sixteen patients were in the age group of 40 to 49 years , eleven were in the age group of 30 to 39 years , seven were in the age group of 20 to 29 years while only one patient was above 60 years of age. All the five patients suffering from anal fissure were young between the age of 16 to 33 years. The main complication in our study was bleeding in three patients which occurred post operatively after the patient had passed stools first time post operatively. The bleeding was mild. One patient developed sepsis with slight rise of leucocyte count that (TLC 12500).Three patients had anal tags. Two patients complained of involuntary farting. Four patients complained of pain after third post operative day.

Discussion

Haemorrhoidectomy done by by Milligan –Morgan technique (13) which is widely used worldwide (4,7-11) has been used in this study .For fissure lateral sphinctrotomy at 3'O clock was done and for fistula in ano fistulous tract was exised being low lying fistulas. Arbman et al (8) in a series of 77 hemorrhoidectomy procedures by open technique (39 cases) and closed technique observed complications in 5 patients submitted to the open technique and no patient submitted to closed technique. You et al (14), in a series of 80 patients submitted to hemorrhoidectomy by both closed and open techniques did not report any complication, but they observed that less intense pain in the group submitted to closed hemorrhoidectomy , in which healing was faster (75% in 3 weeks) versus open hemorrhoidectomy (13% in 3 weeks). Santos GA et al (4), in a series of 2014 patients submitted to open hemorrhoidectomy, reported 61 cases of surgical complications (3%):38 cases of anal stenosis (1.9%), 19 cases of bleeding (0.9%), 3 cases of worsening of anal hypotonia (0.1%) and 1 case of systemic complication. Gencosmanoglu et al. (15), Carapeti et al. (16) , Ho and Ho (17) and Wolfe et al. (18) , based on their comparative series , say that open technique is better than the closed technique. Others (4) say there is no difference between both techniques in terms of incidence of complications. A randomized trial comparing the PPH (procedure for prolapse and hemorrhoids that is Longo stapled anopexy) procedure with band ligation found significantly increased pain and morbidity using stapler but significantly increased bleeding with banding (19). A systemic review of 15 randomized trials of stapled anopexy compared to excisional hemorrhoidectomy demonstrated significantly shorter operative time, return to work and significantly decreased pain (20). A report of 1-year follow-up from a randomized trial of stapled technique versus conventional hemorrhoidectomy reported similar significant short-term benefits (13). Treatment of fissure with botulinium toxin has high recurrence rate. A cohort study of patients treated with botulinium toxin for fissure demonstrated 42% recurrence at a median of 42 months (21) and lateral sphinctrotomy is the next step for the unhealed chronic anal fissure refractory to medical therapy (22). A cohort study of 35 patients who had failed non-operative management reported 94% fissure healing after open sphincterotomy (23).Few patients may experience minor alterations incontinence following sphincterotomy (24).

Conclusion

The conventional hemorrhoidectomy as per Milligan-Morgan is a very good surgical approach for third and fourth degree hemorrhoids and has similar comparable complication rate. Lateral sphinctrotomy is best suited to those who medical therapy . For fistulas excision of tract, unroofing the

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fistula, eliminating the internal opening and establishing adequate drainage forms the basic principal of fistula surgery as falure to open the entire tract leads to recurrence.

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