The Professional Medical Journal
www.theprofesional.com

ORIGINAL PROF-2543

HEMORRHOIDAL ENDOSCOPIC BAND LIGATION;

PRESENT PATTERN AND MANAGEMENT OUTCOME AT ISRA UNIVERSITY HOSPITAL

Dr. Muhammad Akram Bajwa[1], Dr. Javeria Farid[2], Dr. Maimoona Khushk[3], Dr. Muhammad Saeed[4]

1. MBBS, MD Gastroenteology (Ph.D Gastroenterology) Assistant Professor Department of gastroenterology Isra University Hospital Hyderabad
2. MS General Surgery Senior registrar Department of general surgery Isra University Hospital Hyderabad
3. FCPS II Trainee Department of general surgery Peoples University Medical & Health Sciences Nawabshah
4. MBBS Liaquat University Medical & Health Sciences Jamshoro

Correspondence Address:
Dr. Muhammad Akram Bajwa
National Medical Centre
Near National CNG Khurshid Town
Hala Naka Hyderabad.
drakrambajwa69@yahoo.com
saedarain@yahoo.com

Article received on:
05/06/2014
Accepted for publication:
25/07/2014
Received after proof reading:
17/01/2015

ABSTRACT… Objective: To determine the management outcome of the endoscopic band ligation in the patients with internal haemorrhoids at isra university Hospital Hyderabad Sindh. Pakistan. **Materials and methods:** All the patients were under went sigmoidoscopy and colonoscopy for the complete diagnosis and the patients were excluded, if polyps or evidence of malignancy was found at colonoscopy. Haemorrhoids were sucked with the tip of endoscope from the anal canal and elastic bands were applied. After first treatment session, patients were asked to complete a questionnaire to evaluate the subjective satisfaction, which was classified as poor, good and best. Patients who had with multiple haemorrhoids were recalled for the ligation on remaining haemorrhoids after 2 weeks, if indicated. **Results:** Total 100 patients were included in the study, In complications, intensive pain was found in the 55% of the cases while other complications were seen in very few patients and many patients were seen without any complication. Hospital stay was only one day was noted in the very few patients and mostly patients were discharged after few hours of the procedure. Outcome of the endoscopic band ligation was found excellent in 40% of the cases, good results found in the 45% of the cases and poor results were seen only in the 15% of the cases. Re-endoscopic band ligation was done in the 20% of the cases and recurrence of hemorrhoids was noted in the 30% of the cases. **Conclusions**: We concluded that the endoscopic band ligation is very good management for haemorrhoids without typical complications, with very short hospital stay and recurrences rate.

Key words: hamorrhoids, Endoscopic band ligation.

Article Citation: Bajwa MA, Farid J, Khushk M, Saeed M. Hemorrhoidal endoscopic band ligation; present pattern and management outcome at Isra university hospital. Professional Med J 2015;22(1):027-030

INTRODUCTION

Haemorrhoidal disease is one of the most common anorectal condition[1,2]. It is a common disease in western societies[3,4] affecting all age groups and both gender. While the real prevalence is much hard to find out, because several patients are reluctant to look for medical advice due to different personal, cultural and socioeconomically causes[5].

Haemorrhoid clinically present most commonly with fresh bleeding per rectum, mucosal prolapsed and pruritis[6]. According to Goligher's system of the classification: Grade-I: haemorrhoids non prolapsing; Grade-II: haemorrhoids prolapse on straining but decreases spontaneously; Grade-III: haemorrhoids need manual reduction; Grade-IV haemorrhoids are non decreasable[7].

On 1951 in united state1st time introduced that, rubber band ligation is the very best management procedure of the prolapses and bleeding internal hemorrhoids, and till the now it is considered very cost effective, and safe procedure[8]. It have good results and outcome as compare to medicine and surgery and also without any co relation of significant mortality and morbidity[9]. conservative band ligations carried out along with rigid devices of endoscopy devices with limited maneuverability and the thin pasture of view, and having without ability photographic management[10]. These disadvantages be able to beat uses of the video endoscopic system which gives the complete photographs of the operative condition[11]. Many studies reported fair results of endoscopic band ligation, for haemorrhoides at first therapy and after 1 year treatment[12,13]. The purpose of this study to find out the outcome of

the endoscopic band ligation in the patients with internal haemorrhoids in the term of its efficacy, complications, hospital stay and recurrences rate at isra university Hospital hyderabad sindh Pakistan.

METHOEDS AND MATERIALS

This observational and prospective study was conducted at Isra university hospital Hyderabad sindh Pakistan, with the duration of 1st June 2012 to 31 may 2013. Both genders were enrolled in the study. All the patients with symptomatic internal haemorrhoids, were under went procedure of endoscopic band ligation enrolled in present study prospectively. Written detailed consent was taken from all the cases before treatment. Few patients were referred by general surgeon from Peoples University of medical and health science Nawabshah who were not agree for the open haemorrhoidectomy. All the patients were under went sigmoidoscopy and colonoscopy for the complete diagnosis and during the procedure those patients having polyps and malignancy were excluded from the study. Haemorrhoids were sucked with the tip of endoscope from the anal canal and elastic bands were applied. Complete data was documented and all adverse events were recorded. After 1st first therapy cases were asked to assess the patients and gastroenterologist satisfaction according the classification as; poor, good and best. Patients who had with multiple haemorrhoids were recalled for the ligation on remaining haemorrhoids after 2 weeks, if indicated. The Data was entered and analyzed in statistical program SPSS version 16.0. Simple frequencies and percentages of categorical variables such as gender, disease symptomes, complications, hospital stay and recurrences rate were calculated. No any statistical test was applied for any comparison.

RESULTS

In the present study of hemorrhoidal endoscopic band ligation, male were found more as compare to the females, according to the age group in this study, majority of the patients were found in the age group of 46 to 60 years of the age. Symptoms were found in the patients as constipation, bleeding, irritation and discharge as percentage 85%, 100%, 34% and 25% respectively. Table-I.

Characteristics	Frequency	%
Gender		
Male	61	61%
Female	39	39%
Age groups		
15 - 30	19	19%
31- 45	26	26%
46 - 60	37	37%
>60	18	18%
Symptoms		
Constipation	85	85%
Bleeding	100	100%
Irritation	3 4	34%
Discharge	25	25%

Table-I. Basic characteristics of the patients. n=100

In this study 3rd degree hemorrhoids were seen in high percentage 34.0%, second most common degrees were both 2nd and 3rd, while 1st degree was noted in the 16.0% of the cases. Fig-1.

In complications, intensive pain was found in the

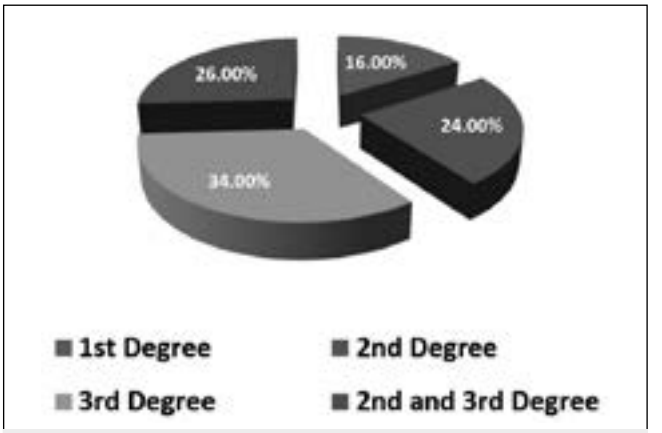

Fig-1. Different stages of heamorrhoids

55% of the cases while other complications were seen in very few patients and many patients were seen without any complication. Hospital stay was only one day was noted in the very few patients and mostly patients were discharged after few hours of the procedure. Table-II.

	Frequency	%

Complications		
Intensive pain	55	55%
Bleeding	20	10%
Anal stenosis	00	00%
Urinary retension	00	00%
Hospital stay		
Some hour after procedure	80	80%
1 day	15	15%
2days	05	05%
3 days	00	00%

Table-II. Postoperative complications and hospital stay (n=100)

Outcome of the endoscopic band ligation was found excellent in 40% of the cases, good results found in the 45% of the cases and poor results were seen only in the 15% of the cases. Re-endoscopic band ligation was done in the 20% of the cases and recurrence of hemorrhoids was noted in the 30% of the cases. Table-III.

	Frequency	%
Recurrences	30	30%
Re endoscopic band ligation	20	20%
Outcome		
Poor	15	15%
Good	45	45%
Best	40	40%

Table-III. Final outcome and recurrences after endoscopic band ligation (n=100)

DISCUSSION

Haemorrhoidal disease is very commonly encountered in 5% of the general population, 50% of the individual over the age of 50 years[14] and more than 15 million people are affected annually in United State[15]. Present study was conducted to find out the outcome of endoscopic band ligation in the patients with 1st, 2nd and 3rd degree of haemorrhoid regarding safety, effectiveness, complications and hospital stay.

In the present study of hemorrhoidal endoscopic band ligation male were found more found as compare to the females, Syed Asad ali was found male to female ratio in his study 9:1[16]. According to the age group in this study majority of the patients was noted in the age group of 46 to 60 years of the age. However Malik showed age range "18 to 73" year with the mean age of (46 years),[17] and Greenberg reported mean age 42 year[18]. Symptoms were found in the patients as constipation, bleeding, irritation and discharge as percentage 85%, 100%, 34% and 25% respectively. Corman ML et al, reported the high percentage 90% of the cases with bleeding, while 80% of cases with prolapsed haemorrhoids[19]. In another study 10% patients had burning, 55% of patients with itching while majority of the cases 85% of the patients with constipation[16].

In present study 3rd degree hemorrhoids were seen in high percentage 34.0%, second most common was both 2nd and 3rd degree while 1st degree was noted in the 16.0% of the cases, while "Bernal JC et al" reported that 2nd degree haemorrhoids in 51.93% and 3rd degree haemorrhoids in 29.83% respectively[20].

According to the complications intensive pain was noted in the 55% of the cases while other complications were seen in very few patients and many patients were seen without any complication. Hospital stay was only one day was noted in the very few patients and mostly patients were discharged after few hours of the procedure. Ming Yao Su et al reported that minor complications occur as; anal bleeding and pain, and 5 cases were underwent re -treatment[21].

Outcome of the endoscopic band ligation had excellent results were seen in 40% of the cases, good results noted in the 45% of the cases and poor results were seen only in the 15% of the cases. Re-endoscopic band ligation was done in the 20% of the cases and recurrence of hemorrhoids was found in the 30% of the cases. In the conclusion of a study of endoscopic band ligation, it is very simple, safe, and effective management method with 3% recurrence rate during one year, after two years recurrences 9.6%, and 16.9% recurrences after 5 years[21].

CONCLUSIONS

We concluded that the endoscopic band ligation is very good, safe and simple management methods for haemorrhoids without typical complications, with very short hospital stay and recurrences rate.

REFRENCES

1. Tan EK, Cornish J, Darzi AW, Papagrigoriadis S, Tekkis PP. **Meta-analysis of short-term outcomes of randomized controlled trials of Ligature vs conventional hemorrhoidectomy.** Arch Surg 2007;142:1209–8.

2. William NS, Russell RCG, Williams NS, Bulstrode CJK. **The anus and anal canal.** In: Bailey & Love Short Practice of Surgery. 24th ed. London: 2006;1255–62.

3. Ohning GV, Machicado GA, Jensen DM. **Definitive Therapy for Internal Hemorrhoids—New Opportunities and Options.** Rev Gastroenterol Disord 2009;9(1):16–26.

4. Wallis de Vries BM , Van der Beek ES, Wijkerslooth LR, Zwet WC, Van der Hoeven JA, Schattenkerk M, *et al*. **Treatment of Grade 2 and 3Hemorrhoids with Doppler-Guided Hemorrhoidal Artery Ligation.** Dig Surg 2007;24:436–40.

5. Acheson AG, Scholefield JH. **Management of haemorrhoids.** BMJ 2008;336:380–3.

6. Thomson WH. **The nature of haemorrhoids.** Br J Surg 1975;62:542–52.

7. Sardinha TC, Corman ML. **Hemorrhoids.** Surg Clin North Am 2002;82:1153–67.

8. MacRae HM, McLeod RS. **Comparison of hemorrhoidal treatments: a meta-analysis.** Can J Surg 1997; 40: 14-17.

9. Jensen SL, Harling H, Arseth-hansen P, Tange G. **The natural history of symptomatic haemorrhoids.** Int J Colorectal Dis 1989; 4: 41-44.

10. MacRae HM, McLeod RS. **Comparison of hemorrhoidal treatment modalities. A meta-analysis.** Dis Colon Rectum 1995; 38: 687-694.

11. Trowers EA, Ganga U, Rizk R, Ojo E, Hodges D. **Endoscopic hemorrhoidal ligation: preliminary clinical experience.** Gastrointest Endosc 1998; 48: 49-52.

12. Su MY, Tung SY, Wu CS, Sheen IS, Chen PC, Chiu CT. **Longterm results of endoscopic hemorrhoidal ligation: two different devices with similar results.** Endoscopy 2003; 35: 416-420.

13. Su MY, Chiu CT, Wu CS, Ho YP, Lien JM, Tung SY, Chen PC. **Endoscopic hemorrhoidal ligation of symptomatic internal hemorrhoids.** Gastrointest Endosc 2003; 58: 871-874.

14. Gencosmanoglu R, Sad O, Koc D, Inceoglu R. **Hemorrhoidectomy: open or closed technique? A prospective, randomized clinical trial.** Dis Colon Rectum 2002;45:70–75.

15. Johanson JF. **Nonsurgical treatment of hemorrhoids.** J Gastrointest Surg 2002;6:290–4.

16. Syed Asad Ali, Agha Taj Mohammad, Mohammad Jarwar, et al. **Outcome of the rubber band ligation with milligan morgan haemorrhoidectomy.** J Ayub Med Coll Abbottabad 2010;22(4): 56-60

17. Misra MC, Parshad R. **Randomized clinical trial of micronized flavonoids in the early control of bleeding from acute internal haemorrhoids.** Br J Surg 2000;87:868–72.

18. La Torre F, Nicolai AP. **Clinical use of micronized purified flavonoid fraction for treatment of symptoms after hemorrhoidectomy: results of a randomized, controlled, clinical trial.** Dis Colon Rectum 2004;47:704–10.

19. Corman ML. **Colon and rectal surgery.** 5th ed. Philadelphia: Lippincott Williams & Wilkins; 2004. p.177–253.

20. Jr Zollinger RM, Zollinger RM. **Open haemorrhoidectomy.** Atlas of surgical operations.17th edi.Mc Graw Hill Inc USA 1993:174–87.

21. Ming-Yao Su, Cheng-Tang Chiu, Wei-Pin Lin, et al. **Long-term outcome and efficacy of endoscopic hemorrhoid ligation for symptomatic internal hemorrhoids.** World J Gastroenterol. 2011 May 21; 17(19): 2431-2436.