

FIRST DEGREE HEMORRHOIDS;

EFFICACY OF INJECTION SCLEROTHERAPY EXPERIENCE IN SURGICAL DEPARTMENT

Dr. Muhammad Yunas Khan, Dr. Syed Iftikhar Alam, Dr. Qutbi Alam Jan, Dr. Ata-ur-Rehman.

ABSTRACT.....Traditionally the treatment of 1st, 2nd and 3rd degree haemorrhoids is conservative management with fibre rich diet and better defecation discipline. If symptoms prevail then there are a wide range of treatment modalities. **OBJECTIVE:** to evaluate the efficacy of injection Sclerotherapy for First degree haemorrhoids using 5% Phenol in Almond oil. **MATERIAL AND METHODS:** This case series study was conducted on 83 patients with first degree piles in Surgical-C unit, Department of Surgery, Khyber Teaching Hospital Peshawar from 01/09/2010 till 01/03/2011. After Informed consent, injection Sclerotherapy with 1-2ml of 5% Phenol in Almond oil was injected in the sub mucosal plane of each pile case above the dentate line. Patients were reviewed at 3 weeks interval for bleeding per rectum for effectiveness of the procedure. **RESULTS:** A total of 83 patients with first degree haemorrhoids included in the study out of which 62 (74.7%) were male and 21 (25.03%) were female with M: F=2.99:1. Average age 41.1 years+0.1 SD with range 20-60 years. Efficacy was observed in 68 (81.83%) patients where 15 (18.07%) patients showed no results. **CONCLUSION:** Injection sclerotherapy is simple, convenient and effective outdoor procedure for first degree haemorrhoids.

Key words: First Degree Haemorrhoids, Anal Canal, Sclerotherapy.

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INTRODUCTION

Haemorrhoids are dilated tortuous veins in relation to the anal canal. They affect both the sexes and 50% of the population has haemorrhoids by the age of 50¹. The symptoms of haemorrhoids include bright red bleeding per rectum, prolapsed or protrusion and pruritisani. Pain is usually seen in thrombosed or strangulated piles². Haemorrhoids can be divided into four grades according to the degree of prolapse³.

First degree remains internal but bleeds while second degree piles prolapse on defecation but reduce spontaneously. Third degree piles reduce manually while fourth degree piles remain prolapsed and cannot be manually reduced⁴.

The traditional treatment for 1st, 2nd and 3rd degree haemorrhoids is conservative (fibre rich diet, better defecation discipline). If symptoms prevail then a wide range of treatment modalities is available⁵. Injection sclerotherapy and electro coagulation are widely used for early haemorrhoids⁶. 5% Phenol in Almond oil is used as sclerosent which obliterates the haemorrhoids vascularity inducing inflammation and

fibrosis which prevents prolapse of the surrounding tissue. Sclerotherapy is 69% effective in 1st degree haemorrhoids^{7,8}.

Haemorrhoids are a very common disease in our society. Various treatment options are available for 1st degree haemorrhoids. Sclerotherapy is a non-surgical modality; it is a less tedious and more comfortable procedure with equally effective early results. Moreover the complications are negligible.

MATERIALS AND METHODS

The cross sectional descriptive study was conducted in the department of General Surgery, surgical "C" unit Khyber Teaching Hospital, Peshawar, Khyber Pukhtoon Khwa from 01/09/2010 till 01/03/2011. A total of 83 patients of 1st degree haemorrhoids were included in the study by consecutive sampling non-probability technique. First degree hemorrhoids were diagnosed on proctoscopy showing dilated tortuous veins and history of passage of fresh blood per rectum of any amount and frequency at OPD. The inclusion criteria was; Patients with age more than 18 years, of either gender with first degree hemorrhoids diagnosed

on proctoscopy and presenting with history of fresh bleeding per rectum. All patients with with previous history of inflammatory bowel disease, chronic liver disease, hemorrhoids surgery, bleeding disorders were excluded from the study as these conditions were causing bias in the study and acting as confounder.

All patients meeting the inclusion criteria and presenting with the first degree hemorrhoids (as per operational definitions) were included in the study. The purpose and benefits of the study were explained to all patients and they were explained that the study is done purely for research and data publication and if agreed upon a written Informed consent was taken.

All patients were subjected to detailed history and clinical examination followed by routine pre operative investigations. Injection Sclerotherapy with 1-2ml of 5% Phenol in Almond oil was injected in the sub mucosal plane of each pile case above the dentate line. Patients were sent home on pain killers and reviewed at 3 weeks interval to determine the efficacy of the drug in terms of episode of bleeding per rectum. All the above mentioned information including name, age, gender and address were recorded on pre designed proforma.

The data was collected on a pre designed proforma and was analyzed in SPSS version 14.0. Mean and standard deviation were calculated for numeric variables like age. Frequencies and Percentages were computed for categorical variables like gender and efficacy. Efficacy was stratified among age and gender to see the effect modification. All the results were presented in the form of tables and graphs.

RESULTS

A total of 83 patients of 1st degree haemorrhoids were included in the study. There were 62 (74.7%) male and 21 (25.30%) were female. (Fig-no. 1) Male to female ratio was 2.99:1. Average age of patient was 41.1

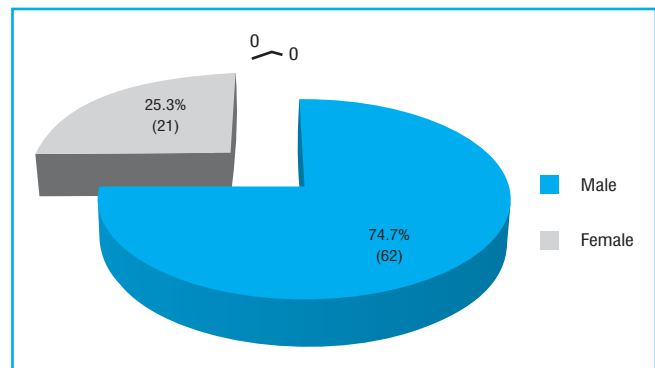


Fig.1: Gender distribution of patients with first degree haemorrhoids treated with ionjection sclerotherapy

years+ 10SD with range 20-60 years. Patient age group was divided into four categories. The most common age group was 31-50 years. 13 (15.7%) patients were less than 30 years old while 24 (28.9%) patients were in the age of 31-40 years. 33 (39.8%) patients were of the age range 41-50 years while 13 (15.7%) presented at the age of more than 50 years.

The frequency of Injection Sclerotherapy in terms of stopping Bleeding per Rectum was observed in 68 (81.91%) patients while in 15 (18.09%) it had no effect. (Fig-no. 2)

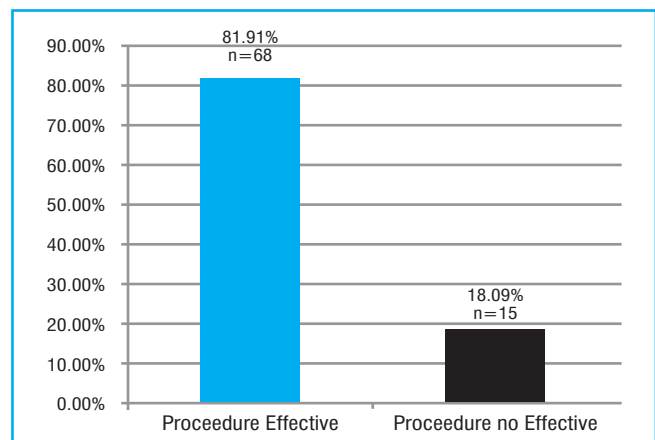


Fig.2: Frequency of effectiveness of injection sclerotherapy in terms of stopping bleeding per rectum in first degrees hemorrhoids

The efficacy was 84.6% in patients younger than 30 years and 87.5% in 31-40 years age group and 12.5% showed no efficacy. 81.8% efficacy was observed in 41-50 years age group while 18.2% showed no

efficacy. (Table-I)

AGE (in years)	Efficacy		Total
	Yes	No	
20 - 30	11 84.6%	2 15.4%	13
31 - 40	21 87.5%	3 12.5%	24
41 - 50	27 81.8%	6 18.2%	33
51 and above	9 69.2%	4 30.8%	13
Total	68 81.9%	15 18.1%	83

Table-I. Age wise distribution of efficacy of sclerotherapy

69.2% efficacy was seen in above 50 years age group while 30.8% had no efficacy. Gender wise efficacy was 85.5% in female and 80.6% in males while no efficacy was seen in 14.3% female and 19.4% in males. (Table-II)

Gender	Efficacy		Total
	Yes	No	
Male	50 80.6%	12 19.4%	62
Female	18 85.7%	3 14.3%	21
Total	68 81.9%	15 18.1%	83

Table-II. Genderwise distribution of efficacy of sclerotherapy

DISCUSSION

Sclerotherapy is the oldest therapy for haemorrhoids and is used since 1869. 5% phenol in Almond oil was used as a sclerosent since that time⁹. the prevalence of haemorrhoids is up to 4% and only 1/3rd of the patients seek medical advice for the condition¹⁰.

Most of the patients in our study I-e 57 (67.7%) were between 31-50 years old. In our study male were more in number than females. Mahmood and Whagma also supported our study¹¹.

Mean age was 41.4% while in one study mean age was 44.1% with male predominance¹².

The chief complaint was something coming out of the anal canal in 53(51%) patients followed by Bleeding P/R in 73 (57.6%) patients. Mean age was 41.1 years while in one study it was 44.1 years¹².

100 patients with 1st and 2nd degree haemorrhoids were treated conservatively with high fibre diet and stool softeners. Out of these 100 patients 75% responded and had no recurrence¹¹.

In one study, Bleeding P/R was cured in 75 out of 100 patients while twelve showed no response¹³. In comparison to 67.3% fully cured of the per rectal bleeding who were subjected to sclerotherapy. Verma et al. From Hong Kong have found an early cure rate of 84% with injection sclerotherapy¹⁴.

Among the national studies, Aftab has found a cure rate of 63% for 1st degree and 60% for 2nd degree haemorrhoids¹⁵ while Saleem has observed cure rate of 95% for 1st degree and 60% for 2nd degree haemorrhoids¹⁶. Rabau states a cure rate of 85-90% at one year follow up^{16,17} but Santos and his co-workers from UK have found this cure to be short lived at 4 years follow up.

Out of 100 patients (33.33%) underwent injection sclerotherapy. 69% patients responded without any complications. This sort of treatment is also mentioned by other authors as highly beneficial for 1st and 2nd degree haemorrhoids^{18,19}.

Out of 97 patients, 13% had pain; infection was seen in 7 patients while 11% patients gave no satisfactory response and ultimately needed rubber band ligation or surgery. The efficacy of injection sclerotherapy is also suggested by other authors²⁰.

Another to another study, different types of sclerosing agents like cow milk, D/water 15%, 25%, 30% saline solutions and 5%Phenol in Almond oil were used^{21,22,23,24,25}.

We have use 5% phenol in almond oil as sclerosent agent that is easily available and economical with well documented sclerosent effect²¹.

According to the questionnaire, 100 patients who had undergone sclerotherapy for 1st degree haemorrhoids, 62% had no bleeding at 24 hours. At 28 days interval, the figure had fallen to 41% although overall improvement was 88%.

CONCLUSION

Conservatively treatment is recommended for 1st and 2nd degree haemorrhoids which sufficiently relieve symptoms. Injection sclerotherapy treatment is the procedure of choice for 1st and 2nd degree haemorrhoids. The technique is simple to learn, easy to perform and an effective outdoor procedure for preventing bleeding per rectum in first degree haemorrhoids.

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Coming together is a beginning,
staying together is progress,
and working together is success.

Henry Ford