ORIGINAL PROF-1016

# **HAEMORRHOIDS**



## DR AYESHA SHAUKAT, FCPS

Assistant Professor of Surgery Fatima Jinnah Medical College Lahore.

# DR FAREED ZAFAR, FCPS

Associate Professor of Gynae & Obst Fatima Jinnah Medical College Lahore.

## DR MUHAMMAD ASLAM, FCPS

Senior Registrar of Surgery Fatima Jinnah Medical College Lahore.

# Dr Aftab A Choudhri, FRCS

Professor of Surgery
Fatima Jinnah Medical College Lahore.
Copyrights: 20 October, 2005

ABSTRACT...... ayesha surg@hotmail.com Background: Haemorrhoids is a common disease effecting people of all ages and both sexes. Though there is a consensus on the treatment of 3<sup>rd</sup> and 4<sup>th</sup> degree haemorrhoids, there is still confusion regarding the ideal treatment for 1<sup>st</sup> and 2<sup>nd</sup> degree haemorrhoids. Objectives: To compare the Injection sclerotherapy and the Daflon for the management of the 1<sup>st</sup> and 2<sup>nd</sup> degree haemorrhoids. Design: Prospective study Setting: OPD for Surgery in Sir Ganga Ram Hospital Lahore, Period: From June 2003 to July 2004, Material and Method: 50 patients of having 1<sup>st</sup> and early second degree haemorrhoids, presenting in surgical out door, were randomly subjected to Injection Sclerotherapy and Daflon 500, and outcome of the two groups was compared, regarding improvement in their presenting complaints and associated symptoms as well as side effects of the treatments. Results: 22 patients of Injection sclerotherapy were cured, while in case of Daflon group 18 patients were cured from their presenting complaints. Conclusion: our study shows that both the Injection Sclerotherapy and the Daflon are good management options for 1<sup>st</sup> and 2<sup>nd</sup> degree haemorrhoids as out door based treatment.

#### INTRODUCTION

Haemorrhoids are defined as a mass of dilated torturous veins in the anorectum involving the venous plexus of the area. They may be exterior, interior or interoexterior. Veins which form internal haemorrhoids become engorged as the anal lining descends and is gripped by the anal sphincters. The mucosal lining is gathered prominently in three places, which are in the areas of three terminal branches of superior haemorrhoidal artery i.e. 3, 7 and 11,0 clock position.<sup>2</sup>

Clinically they manifest as bleeding per rectum, mucous

discharge, prolapse or painful daefecation. Depending upon the symptoms produced the haemorrhoids are classified as follows.<sup>3</sup>

1<sup>st</sup> degree. Bleeding with haemorrhoids that prolapse into but not out of anal canal.

2<sup>nd</sup> degree. Bleeding and seepage, with haemorrhoids that prolapse on daefecation but reduce spontaneously.

3<sup>rd</sup> degree. Bleeding with seepage, with haemorrhoids that require digital reduction.

4<sup>th</sup> degree. Haemorrhoids that can not be reduced into the anal canal, or are strangulated.

As far as the treatment is concerned there is consensus regarding the treatment of 3<sup>rd</sup> and 4<sup>th</sup> degree haemorroids. But there is still a confusion about the ideal treatment for the first and second degree haemorrhoids.<sup>4</sup> and a wide array of options are available for the 1<sup>st</sup> and 2<sup>nd</sup> degree haemorroids like Banding, photocoagulation, injection sclerotherapy, Lord's procedure, cryosurgery, bipolar electrocoagulation, using 5% phenol in almond oil. Injection Sclerotherapy management is ideal for 1<sup>st</sup> and early 2<sup>nd</sup> degree internal haemorrhoids. It can be carried out on out door basis and no special after treatment is needed.

However it is not flawless. Various disadvantages include.

- 1. It is operator skill dependent.
- 2. There is transient bleeding from the point of puncture.
- 3. Should not be performed in patients with deranged bleeding profile.
- 4. Can cause ulceration at the local site.
- 5. May rarely lead to crippling prostatitis if injected into the prostate anteriorly.<sup>5</sup>

In 1997, Daflon which is 90 % Diosmin and 10 % Hesperiden was introduced in France by Bensande.<sup>6</sup> Daflon acts at the following levels

- 1. It increase the duration of contraction of veins.<sup>7</sup>
- 2. It decreases the synthesis of prostaglandins like PGE 2 and thromboxane B 2, which are responsible for the inflammatory process<sup>8</sup>.
- 3. It increases the local lymphatic drainage.

Side effects of the drug are minimal and include mild GIT disturbances.<sup>9</sup>

#### **AIMS AND OBJECTIVES**

This study was done to compare the treatment of 1<sup>st</sup> and early 2<sup>nd</sup> degree haemorrhoids, using Injection sclerotherapy technique with Daflon 500.

#### MATERIAL AND METHODS

This was a randomized prospective study carried out on 50 patients attending the OPD for Surgery in Sir Ganga Ram Hospital Lahore, during the period of June 2003 to July 2004, with the chief complaints of bleeding per rectum, anal discharge, tenesmus or pruritis due to 1st and 2nd degree haemorrhoids. There was no gender discrimination and patients selected were adults above 18 years of age.

Criteria for non-inclusion in the study were inflammatory bowel disease, cirrhosis, bleeding diathesis, or previous history of surgery for the haemorrhoids. A detailed history was taken from all patients included in the study. General physical examination and proctoscopy finding were recorded. These patients were subjected to few base line investigations, like Hb, bleeding time, clotting time, urine C/E, LFTs.

25 Patients were randomly subjected to Injection Sclerotherapy while 25 were randomly subjected to oral Daflon 500. Daflon 500 was given in the dose of 3 tab bid after meals for 3 days fallowed by 2 tab twice daily for 4-7 days. On the 7<sup>th</sup> day symptoms and any relief in symptoms was recorded and the dose was further reduced to 1 tab bid for the next 80 days.

No special surgical preparation was necessary for Injection Sclerotherapy and procedure was carried out in out patients department. A proctoscope was introduced and haemorrhoids were displayed. Using 18 Guage spinal needle attached to 10 cc syringe containing 5% phenol in almond oil. Injection was introduced at the point just above the main anal mass of heamorrhoids, into the submucosa. Only 1 cc of injection was introduced into each presenting pile. The injection should produce the elevation and pallor of the mucosa as it spreads in the submucosa upwards to the pedicle and downwards to the internal haemorrhoids.

If required the injection was repeated after 6 weeks. Patients were labeled cured (C), improved (I), unchanged (U) or worsened depending upon the relief from the symptoms.

- 1. Cured: Absolute disappearance of the symptoms.
- 2. Improved: occasional or minimal discomforts
- 3. Unchanged: No relief.
- 4. Worsened: Presenting symptoms had aggravated or new symptoms had appeared.

Primary symptoms were taken into consideration for relief, was bleeding per rectum (mild, moderate or severe) associated symptoms like tenesmus, discharge and pruritis were also taken into consideration.

Table I. Data of two groups, Injection Sclerotherpy versus Daflon 500.			
Characteristics	Injection Sclerotherapy	Daflon	
Age	20-71	18-55	
Sex			
Male	16	14	
Female	09	11	
Duration of Bleeding			
Mild	8(32%)	10(40%)	
Moderate	11(44%)	13(52%)	
Severe	6(24%)	2(8%)	
Associated Symptoms			
Pruritis Ani	6(24%)	3(12%)	
Anal Pain	1(4%)	2(8%)	
Constipation	18(72%)	16(64%)	
Diarrhoea	2(8%)	4(16%)	
Mucous Discharge	6(24%)	4(16%)	
Tenesmus	1(4%)	0(0%)	
Proctoscopy			
1 <sup>st</sup> Degree Haemorrhoids	10(40%)	14(56%)	
2 <sup>nd</sup> Degree Haemorrhoids	15(60%)	11(44%)	

### **RESULTS**

Age of the patients varied between the 18-71 years. Total 50 Patients were included in this study, 30 were male and 20 were female. Those who were subjected to injection sclerotherapy, 32% presented with complaints of mild bleeding in the form of drops of bright red blood during daefecation, while 44 % had moderate bleeding i.e. in the form of streak of blood during daefecation and 24 % had severe bleeding in the form of a stream of pool during daefecation.

While in patients who were taking Daflon 40% had presented with mild bleeding, 52 % had presented with moderate bleeding and 8 % had presented with severe bleeding. Among the associated symptoms constipation was the leading complaint. 72 % of patients in Injection sclerotherapy had presented with constipation while 64 % in the Daflon group also had constipation. On Proctoscopy 48 % of the patients had 1<sup>st</sup> degree haemorrhoids and 52 % had 2<sup>nd</sup> degree haemorrhoids.

Table II. Relief of symptoms according to C, I, U, W compare in both groups			
	Injection Sclerothepy	Daflon	
С	22	18	
I	0	2	
U	1	3	
W	1	0	
R (Rurrence)	1	2	

A record of relief of symptoms was kept, 22 patients under going Injection sclerotherpy were cured, while 18 taking Daflon were also cured. Two patients taking Daflon said there symptoms improved. One Patient who underwent Injection sclerotherapy said his condition was unchanged. While 3 taking Daflon also declared that there was no benefit. Only one patient's condition was worsened due to local ulceration leading to severe pain after being subjected to Injection sclerotherapy. While none taking Daflon had any complication.

Recurrence of symptoms after cessation of treatment

were noted in one patients after injection sclerotherpy while 2 patients taking Daflon also came back with recurrence.

### **DISCUSSION**

The wall of the anorectum contains the terminal branches of superior haemorrhoidal plexus and enlargement of these results in the internal haemorrhoids. The three principal site of haemorrhoids are at 3, 7, 11'o clock position.<sup>10</sup>

There is a concensus on the treatment for the 3<sup>rd</sup> and 4<sup>th</sup> degree haemorrhoids and it is haemorrhoidectomy. However the best treatment for the 1<sup>st</sup> and 2<sup>nd</sup> degree haemorrhoids is still a enigma. Various options used for the treatment, include Injection sclerotherapy, Lords procedure. Cryotherpy, infrared coagulation, laser therapy, direct electrocaurtery and rubber band ligation.

Daflon focuses on the anti inflammatory pathology of haemorrhoids by increasing the duration of the contraction of veins and local lymphatic drainage. <sup>11</sup> It also decrease the synthesis of prostaglandins like PGE 2 and Thromboxanane B 2. The anti-inflammatory effects of the Daflon are reflected in the reduction of capillary hyperpermiability and fragility. <sup>12</sup>

In our study male patients out numbered female once again certifying that it is a male predominant disease. The number of patient cured from the presenting complaints, were more in the Injection sclerotherapy group (22 out of 25) but was comparable to the Daflon group (18 out of 25). Worsening of symptoms was observed in one patient undergoing injection sclerotherapy while no patients taking Daflon showed any worsening. Relapse of symptoms was again more in Daflon (2 out of 25) but again comparable with Injection sclerotherapy (1 out of 25).

### CONCLUSION

Thus it can be concluded from our study that in the present day, both Injection Sclerotherapy and Daflon can be recommended for the treatment of 1<sup>st</sup> and 2<sup>nd</sup> degree haemorrhoids as the results were almost equivocal.

Though the Injection Sclerotherapy is operator dependant and may be associated with complications while Daflon is more safe to use and can achieve equally good results provided there is patient compliance, as it has to be taken over long period and is still considered expensive for use among our average population.

#### REFERENCES

- Thomas CL, editor. Taber's Cyclopedic Medical Dictionary. 17th Ed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd; 1993: 882.
- Norman S William. The Anus and Anal Canal. Bailey & Love short practice of Surgery. 23rd Ed. Arnold London 2000; 61: 1128.
- Brisinda G. How to treat haemorrhoids. BMJ 2000; 321:582-3.
- Milligan ETC, Morgan CN, Jones LE, Officer R. Surgical anatomy of the anal canal, and the operative treatment of heamorrhoids. Lancent 1937;ii: 1119-24.
- Norman S William. The Anus and Anal Canal. Bailey & Love short practice of Surgery. 23<sup>rd</sup> Ed. Arnold London 2000; 61: 1130.
- Bensaude A, Vigule R, Naouri J. The Medical Treatment of Acute Haemorrhoidal Premenstrual episodes and haemorrhoidal congestion. La Vie Medicate 1971-1972;52:39-45.
- Labrid C, Dahault J, Vix C. Pharmacological properties of Daflon 500 mg. Int Jr Med 1987;85: 30-5.
- 8. Damom M, Flandre O, Michel F, Perdix L, Labrid C, Crastes de paulet. Effect of chronic treatment with a flavanoid fraction on inflammatory granulaoma. Drug research 1987; 37: 1149-53.
- Meyer OC. Safety and Security of Daflon 500 mg in venous insufficiency and in haemorrhoidal disease. Angiology 1994; 45: 579-84.
- Morris PJ, and Malt RA. Oxford Textbook of Surgery 1994;1:1127.
- Behar A, Largue G, Cohen-Bonlakia F, Baillet J. Study of capillary filtration by double labeling 1131-albumin and Tc99m red cells. Application to pkarmacodynamic activity of Daflon 500 mg. Int Angiol 1988;7:35-8.
- Galley p. Study of activity of Daflon 500 on capillary resistance. Int J Med 1987;88: 25-6.