## **Original Research Article**

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# Successful non-surgical management of all degree hemorrhoids

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## **ABSTRACT**

**Background:** To evaluate the patients with primary hemorrhoids after employing mainly the non-surgical treatment in all degree hemorrhoids.

**Methods:** A prospective and descriptive study over three hundred and fifty (350) patients in four-year period. Concomitant anal fissure, anal fistula, secondary hemorrhoids, and recurrent hemorrhoids were excluded from the study.

**Results:** Total 350 patients (age range-18-80 years). Female340 (97.14%) and male10 (2.58%) admitted in surgical OPD of three different hospitals during the period of Feb 2013- Jan 2017. All patients were thoroughly examined abdominally and per rectally and proctoscopied as well to rule out concomitant pelvic and perineal pathologies. All proctoscopic findings and treatment were done by single surgeon. Treatment of hemorrhoids was categorized into three types. Type I, conservative (fiber +oral lubricants + in jeer + micronized purified flavonoid fraction + sitz bath), type II, injection sclerotherapy & type III, surgery (open Hemorrhoidectomy). All degree hemorrhoids were first kept on conservative treatment and followed weekly for bleeding and hemorrhoid swelling. Only 38.57% required Injection sclerotherapy in cases where conservative treatment was failed, large hemorrhoid swelling (> 2cm size) seen on first proctoscopy and in cases where frequent fresh bleeding episodes found either on every 2<sup>nd</sup>-3<sup>rd</sup> day or every passage of stool. Strangulated bleeding hemorrhoids dealt with anal strangulation. Open hemorrhoidectomy was done in non-compliant and in patients with exclusive external hemorrhoids.

**Conclusions:** Although conservative oral therapy has been given appreciating results but in adjunct with injection sclerotherapy the optimal results were promising.

Keywords: Conservative treatment, Hemorrhoid, Surgery

## INTRODUCTION

Hemorrhoid is the abnormal downward displacement of the anal cushion along with abnormal venous dilatation. The majority of hemorrhoid symptoms arise from enlarged internal hemorrhoids, with bleeding as the most common presenting symptom. <sup>1</sup>

Treatment ranges from life style and dietary modification to surgery depending not only on the degree of

hemorrhoid but to the severity of the symptoms as well. There are 3 goals of hemorrhoid therapies: (1) to decrease hemorrhoid vascularity (2) to promote hemorrhoid fixation to the rectal wall to improve prolapse, and (3) to reduce redundant tissue.<sup>2</sup>

Nonsurgical approaches are successful in 80%-99% of patients with hemorrhoidal issues, but in no responders, surgery can be contemplated.<sup>3,4</sup> Number of non-surgical therapies has been proposed to treat hemorrhoids. Fiberrich diet, figs (three figs serving 5 grams of fiber which

help in bulk formation, easy bowel movement and prevent constipation), drinking sufficient amounts of water several times a day, and probiotics (rich in yogurt), ripe banana fruit the avoidance of straining or minimizing time in the toilet during defecation, sitz bath, is excellent for treating constipation. Banana milk shake at least 3 to 4 times daily used to ease the pain of piles.<sup>5-7</sup>

There is moderate-quality evidence to support the use of dietary fiber in the medical treatment of symptomatic hemorrhoid disease as well as an indication that continued use of fiber may decrease the likelihood of recurrence. 8,9 Oral flavonoid consisting of 90% diosmin and 10% hesperdin is the most common flavonoid has been used extensively in Europe and Asia. It is a veno active agent capable of causing increased venous tone; decreased capillary permeability facilitates lymphatic drainage and having anti-inflammatory effect. 10,11

Sclerotherapy involves the injection of one of a number of sclerosants into the submucosal space of the hemorrhoid cushion causes thrombosis of the involved vessels, sclerosis of the connective tissue, and refixation of the prolapsing mucosa to the underlying rectal muscular tissue.<sup>12</sup> The potential complications from sclerotherapy include pain (12%-70%), urinary retention, abscess, and impotence, although serious complications are uncommon.<sup>2,12</sup>

Surgical hemorrhoidectomy has several technical methods like open method Milligan Morgan and closed Ferguson technique. These techniques are highly effective and have low recurrence rates, but are offset by significant pain and a prolonged recovery period. Complications have included urinary retention (2%-36%), bleeding (0.03%-6%), infection (0.5%-5.5%), anal stenosis (0%-6%), and incontinence (2%-12%). Circular stapling device not used now a day due to its serious complications like anovaginal fistula, fistula in ano, hemorrhage, sepsis, and rectal perforation. 13

Trans anal hemorrhoidal arterial ligation (HAL) and repair of anorectal mucosa (RAR) is a newer surgical technique that uses Doppler ultrasound guided identification and suture ligation of the distal rectal arterial branches and simultaneous repair of the prolapsed hemorrhoidal cushions. <sup>14</sup> Our study designed to show the promising beneficial effect of non-surgical treatment of hemorrhoids.

## **METHODS**

Study was prospectively designed on three hundred and fifty (350) patients only in four-year period. All clinical history and peri anal region examination and proctoscopy was performed in outpatient department. And treatment regimen was given according to the bleeding and non-bleeding hemorrhoids. Bleeding hemorrhoids were admitted and properly investigated in hospital and was treated with intravenous trans amine and blood

transfusion if needed. Such cases were also put on oral purified micronized flavonoids agents and prolapse was reduced back in anal canal which was followed by anal packing; subsequently on very next day oral laxatives and warm sitz bath were started and patient was proctoscoped again to see further bleeding status.

Non-bleeding cases were treated with same conservative treatment and was followed up as an outdoor patient. Concomitant anal fissure, anal fistula, secondary hemorrhoids and recurrent hemorrhoids were excluded from the study.

#### Inclusion criteria

All degree of primary hemorrhoids.

#### Exclusion criteria

Concomitant anal fissure and anal fistula, secondary hemorrhoids, and recurrent hemorrhoids.

## **RESULTS**

Total 350 patients (age range-18-80 years) Female 340 (97.14%) and male10 (2.58%) admitted in surgical OPD of three different hospitals (Isra university hospital, Memon Charitable hospital and Red Crescent hospital) during the period of February 2013- January 2017. All patients were thoroughly examined abdominally and per rectally and proctoscopied as well to rule out concomitant pelvic and perineal pathologies. All proctoscopic findings and treatment were done by single surgeon. The proctoscopic findings shown in Table 1.

Table 1: Proctoscopic findings: total-350 (100%).

Degree of hemorrhoids	Total 350 (100%)
First	122 (34.8%)
Second	118 (32.7%)
Third	80 (22.2%)
Fourth	30 (8.5%)

Treatment of hemorrhoids was categorized into three types. Type I, conservative (fiber +oral lubricants + in jeer + micronized purified flavonoid fraction + sitz bath), type II injection sclerotherapy and type III surgery (open hemorrhoidectomy). All degree hemorrhoids were first kept on conservative treatment and followed weekly for bleeding and hemorrhoidal swelling. Only 38.57% required Injection sclerotherapy in cases where conservative treatment was failed, large hemorrhoid swelling (> 2cm size) seen on first proctoscopy and in cases where frequent fresh bleeding episodes found either on every 2<sup>nd</sup>-3<sup>rd</sup> day or every passage of stool.

Strangulated bleeding hemorrhoids dealt with anal strapping, conservative treatment and later with injection sclerotherapy, which was given after resolution of bleeding and strangulation. Open hemorrhoidectomy was done in non-compliant patients (tedious of taking medications and had low threshold for peri anal region pain). It was also employed in patients with exclusive external hemorrhoids. Post-operative pain was relieved by taking analgesics and sitz bath. No complication of stenosis or incontinence or urinary retention was seen in any patients.

The prognoses of the patients are shown in Table 2.

Table 2: Prognosis of	proposed	treatment:	total-350	(100%).

Treatment type	Components of the given treatment	Prognosis of the treatment
Type I	Conservative (fiber +oral lubricants + in jeer + micronized purified flavonoid fraction (MPFF) + sitz bath)	205 (58.57%)
Type II	Conservative+ injection sclerotherapy	135 (38.57%)
	Session I	115 (85.18%)
	Session II	20 (14.81%)
	Session III	Not required
Type III	Surgery	10 (2.85%)

## **DISCUSSION**

The peak prevalence occurs between the ages of 45-65 years and the development of hemorrhoids before the age of 20 years was unusual.<sup>15</sup> However, extremes of ages were seen in our study i.e. below 20 and above 75 years. Reason was the acquisition of the western diet/refine diet (increase use of junk food like pizza, burger etc) and luxurious life style (decrease mobilization).

Similar to our study; in a guideline by the American Society of Colon and Rectal Surgeons (ASCRS), a Cochrane analysis of increased fiber intake by 378 patients, in 7 randomized trials demonstrated benefit in both symptomatic hemorrhoid prolapses and bleeding.<sup>2</sup> Role of oral flavonoids in 14 randomized trials and 1514 patients suggested that it reduces risk of bleeding by 67% where as in our study 75% positive results were obtained in total of 205 patients.<sup>10</sup>

Demonstrated; Khoury et al the control of bleeding in 89.9% of patients with grades 1 and 2 hemorrhoids with injection sclerotherapy. He further stated that in total of 105 patients 56 cases in single session group and 49 in multiple session groups got relieved in 3-12 month follow up period.<sup>16</sup> Contrary to this; our study showed 95-97% better result in total of 135 patients (115 cases in single session group and 20 in multiple session groups) seen in Table 1. Some randomized, controlled trial demonstrated no advantage of sclerotherapy over bulk laxatives. 17,18 Similarly our study showed 58.57% beneficial results with type I treatment regimen (bulk laxative containing conservative treatment) over 38.57% results with type II treatment regimen (injection sclerotherapy) in total of 350 patients. Use of sitz baths (moist heat) several times per day to the perianal area reproducibly lowers the internal sphincter and anal canal pressures of treated patients. 19 our study result comprised the same beneficial soothing and relieving effects in all patients.

## **CONCLUSION**

Although conservative oral therapy has been given appreciating results but in adjunct with injection sclerotherapy the optimal results were promising. The only drawback at the end of the treatment was the presence of retained skin tag or the so called fibrosed hemorrhoids protruding through the anal verge which was being counseled effectively to all patients about causing no harm.

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Ethical approval: The study was approved by the institutional ethics committee

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