

# ORIGINAL ARTICLE

## Assessment of cases of hemorrhoids managed surgically

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### ABSTRACT:

**Background:** Haemorrhoids are abnormal engorgement of arteriovenous plexus in anal cushions lining the anal canal. The present study was conducted to assess cases of hemorrhoids managed surgically. **Materials & Methods:** 56 cases of hemorrhoids of both genders were included. Types and degrees of haemorrhoids, methods used for diagnosis and outcome of management were recorded. **Results:** Type were internal in 32, external in 15 and both in 9 cases. Position of vein involved (o) was 3 clock in 22, 6 clock in 10, 7 clock in 8, 9 clock in 10 and 10 clock in 6 cases. First degree was seen in 7, second degree in 24, third degree in 18 and fourth degree in 5 cases. The surgical procedure performed was open haemorrhoidectomy in 36, closed haemorrhoidectomy in 10, clamp and cautery haemorrhoidectomy in 4, ligature and excision technique in 3 and LASER haemorrhoidectomy in 3 cases. The difference was significant ( $P < 0.05$ ). **Conclusion:** Hemorrhoids are common among middle age person. Most of the cases were of internal type and managed by open haemorrhoidectomy.

**Key words:** Hemorrhoid, arteriovenous plexus, management

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### INTRODUCTION

Haemorrhoids are abnormal engorgement of arteriovenous plexus in anal cushions lining the anal canal. As per the theory of sliding anal canal lining, weakening of supporting tissues of anal cushions lead to blood vessel descent.<sup>1</sup> Even though a common condition in clinical practice; its true prevalence is unknown due to the embarrassment involved in seeking treatment among the affected. Haemorrhoids is estimated to affect about a third of the population. More than half of men and women above 50 years of age are at risk of developing haemorrhoid symptoms during their lifetime.<sup>2</sup>

Hemorrhoids are the most common benign anorectal disorder diagnosed in clinical practice and constitute about 50% of colorectal investigations.<sup>3</sup> Hemorrhoids are so much common in India that every perianal disease is termed as hemorrhoid by most of the patients. Although hemorrhoids are so common, only few patients seek medical treatment due to embarrassment. Hemorrhoids are more common in the adult population.<sup>4</sup> Men are more frequently affected in comparison to women. Hemorrhoids are categorized as internal and external depending on location. Pectinate or dentate line that divides upper two thirds

and lower one third of the anus is the demarcation line between external and internal hemorrhoids. External hemorrhoids are covered by skin and located below this line. Internal hemorrhoids are covered by mucosa and are located above the pectinate line. Internal hemorrhoids are true hemorrhoid with various degrees depending upon extent of protrusion out of anal canal and are located at 3, 7 and 11 o' clock position.<sup>5</sup> The present study was conducted to assess cases of hemorrhoids managed surgically.

### MATERIALS & METHODS

The present study comprised of 56 cases of hemorrhoids of both genders. All were informed regarding the study and their written consent was obtained.

Data such as name, age, gender etc. was recorded. Information on socio-demographic variables, types and degrees of haemorrhoids, age at diagnosis, associated co-morbidities, methods used for diagnosis, management practices, and outcome of management were recorded. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

### RESULTS

**Table I Distribution of patients**

Total- 56		
Gender	Males	Females
Number	36	20

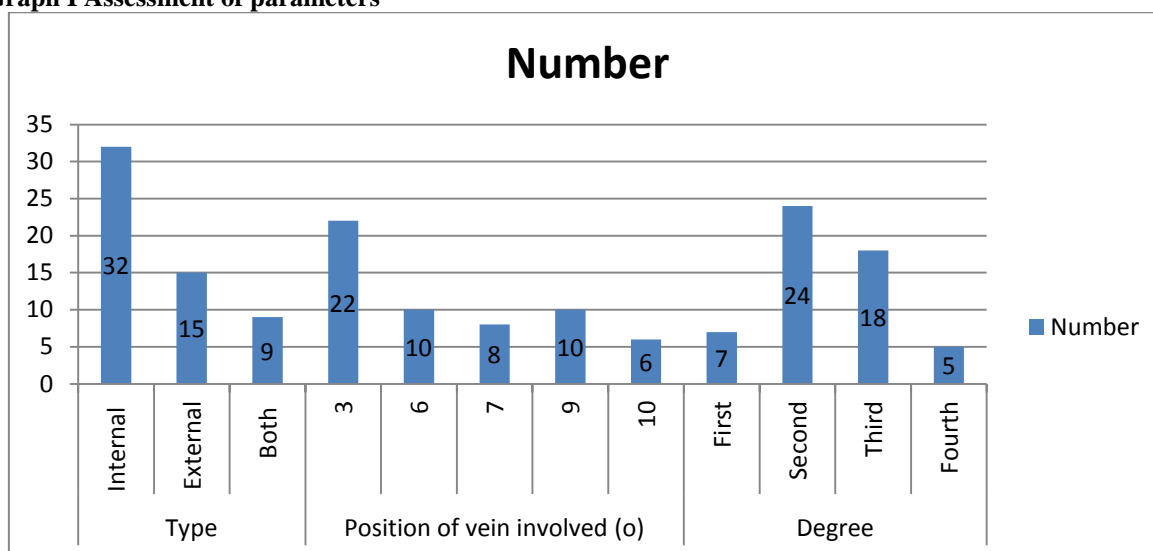
Table I shows that out of 56 patients, males were 36 and females were 20.

**Table II Assessment of parameters**

Parameters	Variables	Number	P value
Type	Internal	32	0.01
	External	15	
	Both	9	
Position of vein involved (°)	3	22	0.04
	6	10	
	7	8	
	9	10	
	10	6	
Degree	First	7	0.01
	Second	24	
	Third	18	
	Fourth	5	

Table II, graph I shows that type were internal in 32, external in 15 and both in 9 cases. Position of vein involved (o) was 3 clock in 22, 6 clock in 10, 7 clock in 8, 9 clock in 10 and 10 clock in 6 cases. First degree was seen in 7, second degree in 24, third degree in 18 and fourth degree in 5 cases. The difference was significant (P< 0.05).

**Graph I Assessment of parameters**



**Table III Surgical procedure performed**

Surgical procedure	Number	P value
Open haemorrhoidectomy	36	0.02
Closed haemorrhoidectomy	10	
Clamp and cautery haemorrhoidectomy	4	
Ligature and excision technique	3	
LASER haemorrhoidectomy	3	

Table III shows that surgical procedure performed was open haemorrhoidectomy in 36, closed haemorrhoidectomy in 10, clamp and cautery haemorrhoidectomy in 4, ligature and excision technique in 3 and LASER haemorrhoidectomy in 3 cases. The difference was significant (P< 0.05).

**DISCUSSION**

Hemorrhoids are clusters of vascular tissues, smooth muscles, and connective tissues that lie along the anal canal in three columns—left lateral, right anterior, and right posterior positions. Because some do not contain sinusoids instead of arteries or veins.<sup>6</sup> Hemorrhoids are present universally in healthy individuals as

cushions surrounding the anastomoses between the superior rectal artery and the superior, middle, and inferior rectal veins. Nonetheless, the term “hemorrhoid” is commonly invoked to characterize the pathologic process of symptomatic hemorrhoid disease instead of the normal anatomic structure. Hemorrhoids are common anorectal disease that affects about most of the population by the age of 50

years.<sup>7</sup> Risk of developing haemorrhoids can be reduced by changes in dietary habits and life style, which would intervene in its pathogenesis. Understanding of current treatment practices in the settings would help in improvement of curative methods. Previous studies done in India have not comprehensively researched this morbidity. It has either been done only on risk factors or clinical presentation of haemorrhoids or has focused on a specific type of haemorrhoid.<sup>8</sup> The present study was conducted to assess cases of hemorrhoids.

In present study, out of 56 patients, males were 36 and females were 20. We found that that type were internal in 32, external in 15 and both in 9 cases. Position of vein involved (o) was 3 clock in 22, 6 clock in 10, 7 clock in 8, 9 clock in 10 and 10 clock in 6 cases. First degree was seen in 7, second degree in 24, third degree in 18 and fourth degree in 5 cases. Agbo et al<sup>9</sup> assessed risk factors, clinical profile and management practices of haemorrhoid cases. Out of the 220 cases, 196 (89.1%) were males, 87.3% were unskilled workers and 123 (55.9%) were from urban areas. Among the cases, 96.5% were non-vegetarians, 150 (68.2%) gave history of frequent lifting of heavy weights, 69 (31.4%) had positive history of prolonged standing and 68 (30.9%) had history of constipation. Majority of cases had internal haemorrhoids 177 (80.5%) and were of third degree 92 (41.8%) variety. As many as 99 (45%) presented with haemorrhoids in 3 o' clock position. The most common presentation was rectal bleeding 175 (79.5%) followed by anal pain 55 (25%). Rectal bleeding was present among most cases (80.8%) with internal haemorrhoids while majority of cases (28.2%) with external haemorrhoids complained of anal pain. Proctoscopy was the most common investigative procedure performed in 75% cases. Among conservative procedures, majority of cases 79 (35.9%) received warm sitz bath. Ferguson haemorrhoidectomy (closed haemorrhoidectomy) was the most common surgical procedure done in 83.8% cases. The outcome of management was recovery in 214 (97.3%) cases and recurrence reported in 6 (2.7%) cases.

We found that surgical procedure performed was open haemorrhoidectomy in 36, closed haemorrhoidectomy in 10, clamp and cautery haemorrhoidectomy in 4, ligature and excision technique in 3 and LASER haemorrhoidectomy in 3 cases. Mortensen et al<sup>10</sup> found that most of the patients (46%) belongs to the younger age (20-40 years). 69% were male patients and 31% were female patients. Patients with higher socioeconomic status were most commonly affected group (37.2%) with hemorrhoids. Commonest symptoms was Bleeding per rectum. In the present study, risk factors for hemorrhoids were low fiber diet, mixed diet, poor hydration, chronic constipation or diarrhea, straining during the defecation, low physical activity and obesity. Sclerotherapy (11.1%) and rubber band ligation (4.1%) were non operative

treatment. Operative procedures performed in the present study were open hemorrhoidectomy (81.4%) and stapled hemorrhoidopexy (3.2%).

Sclerotherapy is currently recommended as a treatment option for first- and second-degree hemorrhoids. The rationale of injecting chemical agents is to create a fixation of mucosa to the underlying muscle by fibrosis. The solutions used are 5% phenol in oil, vegetable oil, quinine, and urea hydrochloride or hypertonic salt solution.<sup>11</sup> It is important that the injection be made into submucosa at the base of the hemorrhoidal tissue and not into the hemorrhoids themselves; otherwise, it can cause immediate transient precordial and upper abdominal pain. Misplacement of the injection may also result in mucosal ulceration or necrosis, and rare septic complications such as prostatic abscess and retroperitoneal sepsis. Antibiotic prophylaxis is indicated for patients with predisposing valvular heart disease or immunodeficiency because of the possibility of bacteremia after sclerotherapy.<sup>12</sup>

## CONCLUSION

Authors found that hemorrhoids are common among middle age person. Most of the cases were of internal type and managed by open haemorrhoidectomy.

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