

# A study on clinical profile of patients with haemorrhoids attending tertiary care hospital

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## Abstract

Hemorrhoids (Piles) are arteriovenous vascular plexuses that surround the distal rectum and anal canal. Hemorrhoids are present in all individuals from birth and become symptomatic when enlarged, inflamed, thrombosed, or prolapsed. The development of symptomatic hemorrhoids is related to a combination of factors including venous engorgement and weakening of the supportive scaffold of connective tissue that supports this vascular bundle and the overlying mucosa. In the present prospective comparative study, 50 cases of 2nd and 3rd degree haemorrhoids were chosen with complaints of bleeding per rectum, mass per rectum, and pain during defecation. Patients were divided into 2 groups of 25 each. One group underwent open haemorrhoidectomy and other underwent closed haemorrhoidectomy. The most common presentation in haemorrhoids is bleeding per rectum in 86% of cases, while mass PR and pain in 70% and 20% of the cases respectively. In the present study 30% of the patients suffered from second degree haemorrhoids while 70% had third degree haemorrhoids.

**Keywords:** Haemorrhoids, piles, arteriovenous vascular plexuses

## Introduction

Haemorrhoids are the most common anorectal disorder and one of the oldest diseases known to mankind. It is haunting the human race since they attained the erect posture. Even though the exact prevalence of this disease is not known, it is estimated that 4% of general population in U.S.A and 50% of the people above 50 yrs have suffered from haemorrhoidal disease once in their life <sup>[1]</sup>. The prevalence of haemorrhoids in India according to recent survey is 40 Million <sup>[2]</sup>.

Hemorrhoids (Piles) are arteriovenous vascular plexuses that surround the distal rectum and anal canal. Hemorrhoids are present in all individuals from birth and become symptomatic when enlarged, inflamed, thrombosed, or prolapsed. The development of symptomatic hemorrhoids is related to a combination of factors including venous engorgement and weakening of the supportive scaffold of connective tissue that supports this vascular bundle and the overlying mucosa <sup>[3]</sup>.

Haemorrhoids play a significant physiologic role in protecting the anal sphincter muscles and augment closure of the anal canal during moments of increased abdominal pressure.

Clinically evident bleeding arises from the peri sinusoidal arterioles and are therefore arterial in nature <sup>[4]</sup>.

The word 'Haemorrhoid' is derived from Greek word hemorrhoids which means flowing of blood (haem = blood, rhoos = flowing). The more commonly used word 'piles' comes from Latin word pila, meaning a pill or ball. To be accurate, the disease ought to be called piles when the patient complains of a swelling and it should be termed 'Haemorrhoids' when one complains of bleeding <sup>[5]</sup>.

Evaluation of haemorrhoids starts with clarifying an individual's primary symptoms. Generally, patients complain of pain, itching, bleeding or a mass per rectum. Patients with any type of anal symptoms usually ascribe their symptoms to "hemorrhoids". It is important to decide whether the symptoms are related to hemorrhoids or some other anorectal pathology. Symptoms from hemorrhoids are related to the location of the enlarged haemorrhoidal tissue relative to the dentate line. Internal hemorrhoids are located proximal to the dentate line and usually associated with painless bleeding. Sharp pain occurring with bowel movements is most likely due to an associated fissure. Enlarged internal hemorrhoids may also prolapse, causing symptoms of pruritus ani or fecal soiling. Severe constant pain is rare with internal hemorrhoids and may occur with gangrenous prolapsed hemorrhoids <sup>[6]</sup>.

## Methodology

In the present prospective comparative study, 50 cases of 2nd and 3rd degree haemorrhoids were chosen with complaints of bleeding per rectum, mass per rectum, and pain during defecation. Patients were divided into 2 groups of 25 each. One group underwent open haemorrhoidectomy and other underwent closed haemorrhoidectomy.

A detailed history of each patient was taken with personal history, family history, diet history with systemic examination of respiratory, cardiovascular, per abdominal examination to know any associated disease and to rule out any cause predisposing to haemorrhoids and local examination including Digital Rectal examination (DRE) and proctoscopy was done as per proforma made for the study and the data entered in the proforma. Investigations included haemoglobin, total count, differential count, blood sugar, bleeding time, blood urea, serum creatinine, HIV, Hbs Ag and urine routine. Other investigations like Chest, X-ray, electrocardiogram, sigmoidoscopy and colonoscopy were done in selected cases.

Study was not randomized, patients were informed about the procedure depending upon their affordability and will.

## Inclusion criteria

- Patients above 18 years with Second and third degree haemorrhoids.

## Exclusion criteria

- First and fourth degree haemorrhoids.
- Age group less than 18 years.
- Recurrent haemorrhoids.
- Secondary haemorrhoids.
- Haemorrhoids with fissure or fistula in ano.
- Inflammatory bowel disease.
- Previous rectal surgeries.

Patients were prepared the previous day, perianal region, perineum and back were shaved. The informed written consent was taken, pre-anesthetic evaluation was done and a soap water

enema was given the night before and on the morning of the surgery. Patients were kept nil orally from the previous night. Patients was administered enema either using soap water or proctolysis. Prophylactic antibiotics were given on the day of surgery, before the procedure. Patient was explained about the effects and complications of the procedure.

## Results

**Table 1:** Age and sex distribution

Age in years	Male	Female	Total
21-30	3	4	7 (14%)
31-40	11	8	19 (38%)
41-50	10	1	11 (22%)
51-60	7	2	9 (18%)
>60	4	0	4 (8%)
Total	35	15	50

In our study haemorrhoids were more prevalent in the age group (38%) and less in the age group above 60 years (8%). There is a predominance of males compared to females, except for the age group 21-30.

**Table 2:** Distribution based on Sex

Sex distribution	No. of cases (n=50)	%
Male	35	70
Female	15	30

In the present study 70% of the cases were male and 30% were female.

**Table 3:** Presenting symptoms of study group

Presenting symptoms	Number	%
Bleeding PR	43	86
Mass PR	35	70
Pain	10	20

The presenting symptoms of the 50 cases that underwent open and closed haemorrhoidectomy are as follows:

The most common presentation in haemorrhoids is bleeding per rectum in 86% of cases, while mass PR and pain in 70% and 20% of the cases respectively.

**Table 4:** Degree of haemorrhoids distribution

Degree	Number	%
2nd Degree	15	30
3rd Degree	35	70

In the present study 30% of the patients suffered from second degree haemorrhoids while 70% had third degree haemorrhoids.

## Discussion

Haemorrhoids can occur at any age but the peak incidence is found in 5th decade of life. Early presentation can be attributed to the changing dietary habits and lifestyle modifications

leading to chronic constipation and straining for defecation.

In this study the overall mean age of presentation of symptomatic haemorrhoids was 43.02 +/- 11.67 Years (Mean +/- SD), where as in patient who went open haemorrhoidectomy was 43.37 +/- 11.82 years and in close haemorrhoidectomy it was 42.96 +/- 11.77 years. The age of patients ranged from 25-65 years. Majority of patients were in 4th decade of life (38%) and minimum in the age group above 60 years (8%).

The results obtained in this study are comparable and almost similar to the studies conducted by Ho7, Carapeti8.

The studies conducted by Johannsson9, M Mik *et al.* 10 reported higher mean age of presentation at around 52-53 yrs. Whereas, in studies done by Shaishav patel11 concluded that it is between 35-40 Yrs.

Majority of the standard textbooks of General Surgery states that haemorrhoids are common in both male and females. Hemorrhoids are common in female, but due to their reluctant shy nature and fear for surgery most of the female population do not approach for any treatment and remain undiagnosed.

In the present study the male to female ratio among the patients who underwent haemorrhoidectomy was 2.3. This result is similar to study done by G Arbman12 who reported a ratio of 2.5. All the previous studies yielded a result, where haemorrhoids were more common in males except the studies done by Khalil Ur Rehaman13 (0.4) and Shaishav patel 11 (0.7) which reported the haemorrhoids are common in females than males.

The symptoms of haemorrhoids are bleeding PR, Mass PR, pain during defecation and after defecation, Soiling, pruritis, Constipation, anal discharge. Among the following the most common presenting symptom is bleeding PR followed by mass and pain.

In the present study bleeding PR was common presentation (86%) followed by Mass PR (70%) and Pain (22%). All of the previous studies done by Steinberg14, Murie15 yielded similar result to us, where bleeding PR was reported by 80-95% of the patient of their studies. Pain as a symptom was quite high in studies of Arroyo16 (55%) and Murie15 (44%) when compared to our study. In some of the studies Mass PR was 100% because they selected only third and fourth degree haemorrhoids but we have included only second and third degree of haemorrhoids in our study.

## Conclusion

- Haemorrhoids are common in 4th and 5th decade of life.
- It is more common in males than females.
- Bleeding per rectum, Mass per rectum and anal pain are the most common presentation of haemorrhoids.

## References

1. Markakis DA. Regional anaesthesia in paediatrics. *Anesthesiol Clin North America*. 2000;18(2):355-9.
2. Linda J Rice. Local and Regional Anesthesia Smith's Anesthesia for Infants and Children 5th edition; Chapter. 1990;16:393-25.
3. Lynda T Wells MD FRCA, Deborah K Rasch MD. Emergence "Delirium" After Sevoflurane Anesthesia: A Paranoid Delusion? *Anesth Analg*. 1999;88:1308-10.
4. Martindale SJ, Dix P, Stoddart PA. Double-blind randomized controlled trial of caudal versus intravenous S(+)-Ketamine for supplementation of caudal analgesia in children *British Journal of Anaesthesia*. 2004;92(3):344-47.
5. Willis RJ. Caudal epidural blockade. In: Cousins MJ, Bridenbaugh PO, editors. *Neuraxial blockade in clinical anaesthesia and management of pain*. 3rd ed. Philadelphia:

- Lippincott-Raven, 1998, 323-42.
6. Susan Standring. "The Back" Gray's Anatomy 39th edition; Chapter. 2005;45:733-73.
  7. Bártai I, Kerényi M, Falvai J, Szabó G. Bacterial growth in ropivacaine hydrochloride. *Anesth Analg.* 2002;94:729-31.
  8. Burm AG, Stienstra R, Brouwer RP, Emanuelsson BM, Van Kleef JW. Epidural infusion of ropivacaine for postoperative analgesia after major orthopedic surgery: Pharmacokinetic evaluation. *Anesthesiology.* 2000;93:395-03.
  9. Crosby E, Sandler A, Finucane B, Writer D, Reid D, McKenna J, *et al.* Comparison of epidural anaesthesia with ropivacaine 0.5% and bupivacaine 0.5% for caesarian section. *Can J Anaesth.* 1998;45:1066-71.
  10. Collins VJ, editor. Caudal analgesia. In: Principles of anaesthesiology-general and regional anaesthesia. 3rd ed. Pennsylvania: Lea and Febiger, 1993, 1611-21.
  11. Peduto VA, Baroncini S, Montanini S, Proietti R, Rosignoli L, Tufano R, *et al.* A prospective, randomized, doubleblind comparison of epidural levobupivacaine 0.5% with epidural ropivacaine 0.75% for lower limb procedures. *Eur J Anaesthesiol.* 2003;20:979-83.
  12. Knudsen K, Beckman Suurküla M, Blomberg S, Sjövall J, Edvardsson N. Central nervous and cardiovascular effects of i.v. infusions of ropivacaine, bupivacaine and placebo in volunteers. *Br J Anaesth.* 1997;78:507-14.
  13. Robert K Stoelting. "Local Anesthetics" Pharmacology and Physiology in Anesthesia practice 4th edition, 2006, 179-07.
  14. Hofmann-Kiefer K, Herbrich C, Seebauer A, Schwender D, Peter K. Ropivacaine 7.5 mg/ml versus bupivacaine 5 mg/ml for interscalene brachial plexus block: A comparative study. *Anaesth Intensive Care.* 2002;30:331-37.
  15. Casati A, Borghi B, Fanelli G, Montone N, Rotini R, Fraschini G, *et al.* Interscalene brachial plexus anesthesia and analgesia for open shoulder surgery: A randomized, double-blinded comparison between levobupivacaine and ropivacaine. *Anesth Analg.* 2003;96:253-59.
  16. Swartz Donald, Raghunathan Karthik, Dunn Steven, Connelly Neil Roy. Ultrasonography and pediatric caudals *Pediatric Anesthesiology.* 2008;106(1):97-99.

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