

## Original Article

### Management of Haemorrhoids – A Personal Local Experience

**P.G. Jani** M.MED., F.R.C.S., Department of Surgery, University of Nairobi. Fax: 254-20-2717706, Email: janipg@wananchi.com

**Background:** The aim of the study was to analyze the management of patients presenting with haemorrhoids in the local set up.

**Methods:** The records of all patients treated in the private consulting rooms of the author in Hurlingham in Nairobi for haemorrhoids by the author were reviewed.

**Results:** A total of 300 patients with haemorrhoids were treated of which approximately two thirds were less than 50 years of age. The male to female ratio was 2.15: 1 and the commonest mode of presentation was haematochezia. Approximate 25% of the patients were diagnosed by anal inspection alone while 75% had internal non-prolapsed haemorrhoids. 96% of the patients had a 60cm colonoscopy at which 2.8% were found to have a rectal malignancy. Seven patients required emergency surgery for their painful thrombosed external haemorrhoids and 21 patients had a haemorrhoidectomy. Band ligation was performed in 181 patients. None of these had any major complications while two of the haemorrhoidectomy patients had major complications.

**Conclusion:** Haemorrhoids are a common problem and should be diagnosed accurately since appropriate management prevents unnecessary morbidity. Haemorrhoids maybe secondary to proximal rectal pathology. Where possible band ligation provides good symptom relief.

**Recommendation:** It is advisable to perform a 60cm colonoscopy before treating haemorrhoids.

#### Introduction

Haemorrhoids are defined as enlarged anal cushions, which are comprised of the ano-rectal lining and an engorged vascular plexus below it, in the loose areolar tissues<sup>1</sup>.

Haemorrhoids may be internal, which are a plexus of the superior haemorrhoidal vein and covered by mucous membrane, external which are a plexus of the inferior haemorrhoidal vein covered by epithelium and skin below mucocutaneous junction and drain into the systemic circulation, or intero-external when the two varieties are associated.

Understanding of haemorrhoidal pathology and treatment has come a long way. The theory of a sliding anal canal lining and the knowledge that haemorrhoidal cushions are a normal part of anal anatomy should encourage symptom control and removal of exuberant tissue.

It is estimated that up to 50% of the population has haemorrhoids by the age of 50 years<sup>2</sup>. In view of its common occurrence and the fact that haemorrhoids may be symptomatic of a variety of closely related conditions, it is important to diagnose and treat haemorrhoids accurately. Bleeding, as the name *haemorrhoid* implies, is

the earliest symptom. Prolapse is protrusion beyond the anal verge and is a much later symptom. Perianal discharge with antecedent pruritus is common with prolapsed haemorrhoids. Pain is usually absent unless complications supervene. The diagnosis of internal haemorrhoids is confirmed at proctoscopy while prolapsed and external haemorrhoids can be visualized at anal inspection.

Internal haemorrhoids bleed and prolapse to give a mass effect and are graded as follows:-

- First degree - Haemorrhoids that bleed but do not prolapse
- Second degree - Haemorrhoids that prolapse and reduce spontaneously
- Third degree - Haemorrhoids that prolapse but require digital reduction
- Fourth degree - Prolapsed irreducible haemorrhoids

External haemorrhoids do not usually bleed, but can thrombose and cause acute pain presenting as an acute painful perianal haematoma.

Haemorrhoids have plagued mankind since the dawn of history. Hippocrates described the use of a speculum to examine patients and he also

treated haemorrhoids with suppositories, cautery and excision. It seems the fundamentals of treatment of haemorrhoids have not changed since then but with the introduction of new techniques in the last few years the modalities of management of haemorrhoids have certainly changed.

Recently, a minimally invasive, Doppler transducer guided, isolated haemorrhoidal artery ligation, as described by Morinaga provides a useful option for low grade haemorrhoids while stapled mucosectomy, as described by Longo is an emerging treatment for circular protruding Grade III and IV haemorrhoids<sup>3,4,5,6,7,8</sup>.

In developing countries however, the majority of patients with haemorrhoids undergo sclerotherapy or band ligation for low-grade haemorrhoids or haemorrhoidectomy for high grade or intero-external haemorrhoids<sup>9,10,3</sup>.

#### Patients and Methods

The study was a retrospective analysis of all patients treated by the author for haemorrhoids. A total of 300 patients' files were reviewed to analyze age, sex, presenting clinical feature, investigations, treatment and outcome of management. After investigation, haemorrhoids were treated medically if early or because of patient's preference; by band ligation if internal or by haemorrhoidectomy if intero-external

haemorrhoids. Medical treatment comprised of increased fibre and water intake, stool softeners and suppositories.

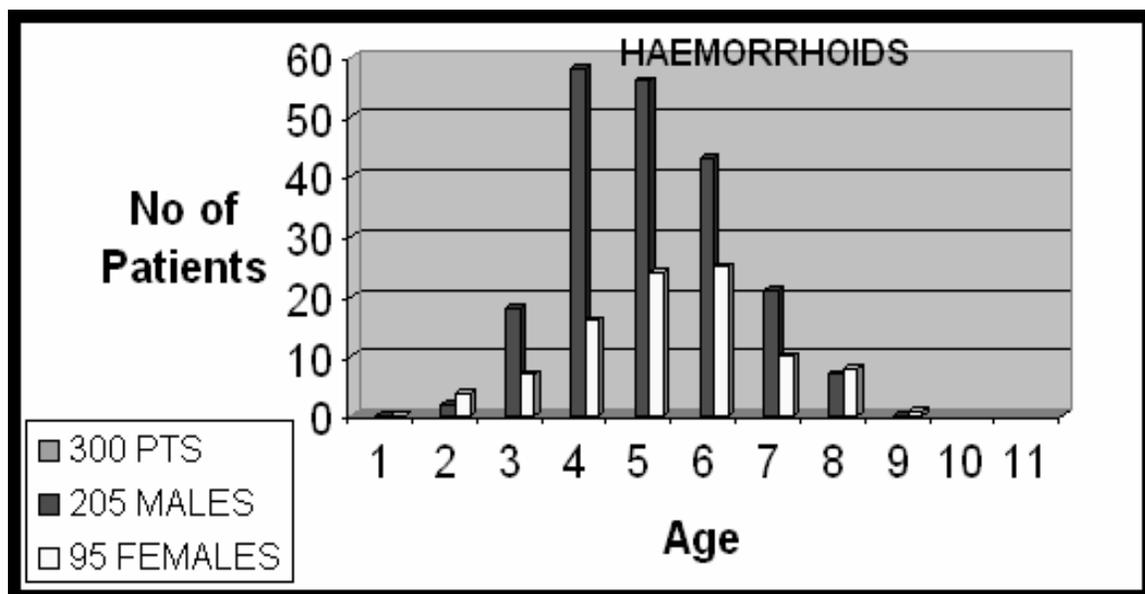
Haemorrhoidal band ligation was performed on an outpatient under light intravenous sedation where necessary. Proctoscopy was performed and haemorrhoids that prolapsed into the scope upon withdrawal were also banded. Initially only one haemorrhoidal complex was banded but later with adequate experience two or three complexes were banded depending on the size and circumference involved.

Surgical excision was performed for third and fourth degree internal haemorrhoids, intero-external haemorrhoids, external haemorrhoids and also in some patients with chronic symptoms. The wounds were primarily closed if there was no significant compromise of the lumen after excision. Patients presenting with a thrombosed external haemorrhoid and severe pain had emergency surgery.

#### Results

Of the 300 patients with haemorrhoids, 72 were Caucasians, 58 were Asians and 170 were of African origin were diagnosed and treated. The age range is shown in figure 1. The sex ratio was Male to Female sex ratio was 2.15 : 1. Table 1 shows the mode of presentation.

**Figure 1.** Age Distribution by Decades



**Table 1.** Presenting Clinical Features

Symptoms	Number of Patients
Haematochesia	127
Mass / swelling at anus	45
Discharge / Pruritus at anus	39
Pain / Discomfort at anus	41
Alteration of bowel habits	93
Others*	11

\* The 11 others were patients who had other symptoms and included those who complained of backache or those who were being examined for a routine medical examination or for a past medical history of colorectal pathology such as ulcerative colitis or carcinoma of the colon.

All the 300 patients had a confirmed diagnosis of haemorrhoids either via anal inspection in 74 patients (24.6%) at which thrombosed perianal haematomas, intero-external haemorrhoids, prolapsed internal haemorrhoids or external haemorrhoids were identified and by proctoscopy in 226 patients (75.3%) at which internal haemorrhoids were identified. A total of 288 patients (96%) had a limited 60cm colonoscopy to rule out proximal causal lesions, Eight (2.8%) of these patients were found to have a rectal malignancy. Pregnancy as a cause of secondary haemorrhoids was noted in 39 (41%) of the 95 female patients seen (31.7%), while 9 patients (3%) had haemorrhoids symptomatic of straining at micturition and 74 patients (24.7%) had haemorrhoids associated with chronic constipation. There were 235 (78.3%) patients with internal haemorrhoids, 11 (3.7%) with external haemorrhoids and 54 (18%) with intero-external haemorrhoids.

Table 2 shows the degree in the 235 patients with internal haemorrhoids. In 191 (81.2%), the haemorrhoids were second degree, only two (0.8%) of the cases presented with fourth degree haemorrhoids (Table 2).

**Table 2.** Degree of internal haemorrhoids in 235 Patients

Haemorrhoids	Patients	%
First Degree	35	14.9
Second Degree	191	81.3
Third Degree	7	3.0
Fourth degree	2	0.8
<b>Total</b>	<b>235</b>	<b>100</b>

Of the 11 patients with external haemorrhoids 9 presented with a thrombosed external haemorrhoid and 7 of which required emergency evacuation of the haematoma for relief of acute pain. The other two were managed conservatively since they presented late with resolving symptoms. None developed any complications on follow up.

Twenty one other patients were offered a haemorrhoidectomy and most of these patients had closure of their wounds if compromise of the anal lumen was thought not to be significant. Of these 21 patients operated for haemorrhoids, two developed complications. One patient suffered from post-operative bleeding and required re-operation for a slipped ligation of the pedicle and another patient developed a post-operative stricture that required serial dilations. Both patients had relief of their symptoms on follow up.

A total of 181 patients had haemorrhoidal banding performed during which procedure, an average of 4 rings were fired. Of the 181 patients whose haemorrhoids were banded, 29 patients developed minor complications. Sixteen of the 181 patients required rebanding either for slipped rings or recurrence; 2 of the 16 eventually required haemorrhoidectomy to relieve the symptoms. The remaining 13 patients also had minor complications; 8 developed urinary retention one of which required catheterisation. The others managed to void with the aid of warm baths. Five patients had moderate to severe pain requiring oral narcotic analgesics. None of the patients required removal of the

bands for pain since all were banded above the dentate line.

### Discussion

Haemorrhoids are commonly seen in medical practice. A large variety of closely related conditions are classified as haemorrhoids and it is therefore important to diagnose and treat all anorectal pathologies accurately. This fact is of utmost importance when haemorrhoids are secondary to malignant disease proximally, since delayed diagnosis may have catastrophic results, if in such cases only the haemorrhoids are treated.

More than 50% (61.7%) of the patients in this study were under the age of 50 years and this compares well with other studies<sup>2</sup>. In developing countries with younger populations, the fact that haemorrhoids are common and that most of the patients are young has a great economic impact.

The diagnosis of haemorrhoids was possible in approximately a quarter of the cases simply by anal inspection alone. The other 75% were diagnosed on proctoscopy although in all patients it is important to perform a digital rectal exam as well. In addition to diagnosing haemorrhoids it is mandatory to check for proximal colorectal lesions especially malignancies so as to correctly diagnose the haemorrhoids as secondary and then provide appropriate therapy. In 2.8% of the cases in the present study, the haemorrhoids were secondary to a rectal carcinoma which further emphasizes the fact that all patients with haemorrhoids should undergo a Sigmoidoscopy or a limited 60cm colonoscopy if available, prior to definitive therapy for haemorrhoids.

Since the study was in a private practice setting, the majority of the patients (>95%) presented with lower grade haemorrhoids and therefore were provided with haemorrhoidal band ligation treatment. Whenever possible, band ligation, is more preferred to haemorrhoidectomy which has a proven long-term efficacy, albeit at the price of increased pain and complications<sup>11,12</sup>.

As evidenced from this study, majority of the patients who had their haemorrhoids banded suffered no major complications while 2 of the 21 patients undergoing haemorrhoidectomy had

major complications. Moreover haemorrhoidal band ligation can easily be performed on an outpatient basis and quite often without any sedation. Outpatient rubber band ligation has been shown to be safe and affective therapy for symptomatic Grade I, II, and III haemorrhoids and with minimal morbidity<sup>12,13</sup>. In view of the above it may be advisable to recommend band ligation for any haemorrhoids with a narrow pedicle proximal to the dentate line.

### References

1. Sardinha TC, Corman ML. Hemorrhoids. *Surg Clin North Am* 2002; 82:1153- 67, vi.
2. Orlay George. Haemorrhoids-a review. *Australian family physician*, 2003; 32: 523-6.
3. Hetzer FH, Wildi S, Demartines N. (New modalities and concepts in the treatment of hemorrhoids) *Neus in der differenzierten Behandlung des Hamorrhoidalleidens. Schweizerische Rundschau fur Medizin Praxis*. 2003; 92 (38): 1579-83.
4. Muller-Lobeck H. (Ambulatory hemorrhoid therapy) *Ambulante Hamorrhoidalthherapie. Der Chirurg; Zeitschrift fur alle Gebiete der operativen Medizin*. 2001; 72: 667-76.
5. Finco Cristiano, Sarzo Giacomo, Parise Paolo, Savastano Silvia, Merigliano Stefano. (Advantages of surgical treatment of hemoeoids with mechanical sutures) *Vantaggi del trattamento chirurgico della malattia emorroidaria consuturatrice meccanica. Chirurgia Italiana* 2002; 54: 835-9.
6. Lehur PA, Gravie JF, Meurette G. Circular stapled anopexy for haemorrhoidal disease: results. *Colorectal Dis*. 2001; 3: 374-9.
7. Orrom W, Hayashi A, Rusnak C, Kelly J. Initial experience with stapled anoplasty in the operative management of prolapsing hemorrhoids and mucosal rectal prolapse. *Am J Surg*. 2002; 183: 519-24.
8. Law WL, Tung HM, Chu Kw, Lee FCW. Ambulatory stapled haemorrhoidectomy: a safe and feasible surgical technique. *Hong Kong medical journal = Xianggang yi xue za zhi /*

- Hong Kong Academy of Medicine. 2003; 9: 103-7.
9. Gupta Pj, Novel technique: radiofrequency coagulation – a treatment alternative for early-stage hemorrhoids. *MedGenMed* 2002; 4:1.
  10. Uba AF, Ihezue CH, Obekpa PO, Iya D, Legbo JN. Open haemorrhoidectomy revisited. *Nigerian journal of medicine – journal of the National Association of Resident Doctors of Nigeria.* 2001; 10: 185-8.
  11. Cheetham MJ, Phillips RK. Evidence-based practice in haemorrhoidectomy. *Colorectal Dis.* 2001; 2: 126-34.
  12. Perez VF, Fernandez FA, Arroyo SA,
  13. Serrano PP, Costa ND, Candela PF, Ferrer RR, Oliver GI, Lacueva GFj, Calpena RR. Effectiveness of rubber band ligation in haemorrhoids and factors related to relapse. *Revista Espanola de enfermedades digestivas – organo oficial de la Sociedad Espanola de Patologia Digestiva.* 2003; 95:110-4, 105-9.
  14. Vrzgula A, Bober J, Valko M, Franko J, Lukacova Z, Seginak V, (Rubber band ligation of hemorrhoids in ambulatory care) *Elasticka ligatura hemoroidalnych uzlov v ambulatnej praxi. Rozhledy v chirurgii – mesicnik ceskoslovenske chirurgicke spolocnosti.* 2001; 80;(7): 353-5.