

DAY CASE HAEMORRHOIDECTOMY IN A DEVELOPING COUNTRY

*A Nuhu, **A Samateh

Department of Surgery, *University of Maiduguri Teaching Hospital, Maiduguri, Nigeria. and **Royal Victoria Teaching Hospital, Banjul, The Gambia.

ABSTRACT

Background: Ligation excision haemorrhoidectomies are usually done on inpatient basis. Over the years however, there has been an increase in the numbers done on outpatient basis. This retrospective review was conducted to evaluate the results of day case haemorrhoidectomy in a developing country.

Materials and Methods: Forty three consecutive patients, who met the criteria for day case surgery, had ligation excision haemorrhoidectomy, between January 2004 and September 2005 at the Royal Victoria Teaching Hospital (RVTH) Banjul with the intention of same-day discharge from hospital. For each patient, data collected included age, sex, duration of symptoms, degree of haemorrhoids, and duration of rest after the procedure in minutes or hours, whether the patient was discharged same day or needed admission for complications. Local anaesthesia, 1% lignocaine was used for all the patients.

Results: Forty three patients comprising 28 males (65.1%) and 15 females (34.9%), with a male female ratio of 1.87:1 underwent planned day case haemorrhoidectomy. Their mean age was 36.27 +/-10.26 years and range was 25 to 56 years. Forty patients (93%) were discharged on the same day of surgery after a rest period in the day care theatre ranging between 25 minutes and 60 minutes with a mean of 41.2 +/-11.08 minutes. Three (7%) of the patients required admission, two for acute urinary retention and control of excessive pain and the other 5 days postoperative on account of secondary haemorrhage. Pain control was achieved by oral non steroidal anti-inflammatory agents. There were no deaths and majority of the patients were satisfied with the procedure.

Conclusion: Ligation excision (Milligan-Morgan) haemorrhoidectomy is safe and can be performed successfully on out patient basis, saving inpatient health care costs. This is suitable for developing country.

Key Words: Haemorrhoidectomy, Day case, Outcome.

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INTRODUCTION

Haemorrhoids, symptomatic vascular cushions i.e. engorgement of haemorrhoidal venous plexuses with redundancy of their coverings, are a problem that has plagued man kind since the dawn of civilization. The detailed description of haemorrhoids dates back to Hippocrates, who treated the condition with suppositories, cautery and even excision¹. Its treatment has evolved over the years from simple dietary advice to modern office procedures like injection of sclerosants², rubber band ligation³, cryotherapy and infra-red photocoagulation^{4,5}. Surgery in the form of ligation-excision offers the only reasonable chance of cure and remains the gold standard. Day case haemorrhoidectomy is not a new concept especially in the developed world^{6,7}, where studies have shown that with good control of postoperative pain and patient education to allay anxiety, it is safe and feasible.

Its application in a developing country is most appropriate because it will save cost and reduce the waiting time for elective surgery significantly. This study was conducted to assess the experience of a surgical unit in day case haemorrhoidectomy. The paucity of similar reports from the West-African sub region makes this review a base line to stimulate further studies.

MATERIALS AND METHODS

Forty three patients underwent planned day case haemorrhoidectomy at the day care theatre of the RVTH Banjul, The Gambia between January 2004 and September 2005. All the patients were seen and fully assessed in the surgical out patient clinic for suitability for day case surgery. The investigations carried out included, haemoglobin concentration (Hb) and haematocrit (PCV), which must not be less than 10g/dl and 30% respectively and a urinalysis for glycosuria. The classification of haemorrhoids was as described by Dennison *et al*⁶. The patients' American Society of Anaesthesiologists (ASA) grades were 1 and 2. All those with pulmonary, cardiac or renal

Correspondence: Dr A Nuhu
Email :nuhualinvwa@yahoo.com

Problems and haemorrhoids associated with rectal carcinoma, intra-abdominal tumours and other causes were excluded from the study. Informed consent was obtained from all the patients.

All the patients had ligation-excision (Milligan-Morgan) haemorrhoidectomy under local anaesthesia. The prone jack-knife position was adopted with adhesive plaster applied on each side of the anus and strapped to the sides of the operating table, parting the buttocks and exposing the lesion. A sand bag was placed under the lower abdomen to elevate the buttock and further improve access. Local anaesthesia was achieved by infiltrating 3-5mls of 1% lignocaine with 1:100,000 adrenaline into the mucocutaneous junction of each haemorrhoid. Analgesia was achieved by 60mg of intravenous pentazocine perioperatively, and continued with diclofenac sodium, 50mg 8 hourly for five days. All the patients had perioperative antibiotics comprising intravenous metronidazole, ampicillin and gentamycine. This was continued with an oral course of metronidazole and ampicillin for five days.

RESULTS

There were 43 patients in the study, comprising 28 males (65.1%) and 15 females (39.4%) and the male female ratio was 1.87:1. The mean age was 36.27 \pm 10.26 (range 25-56 years). Three patients (7%) had second-degree hemorrhoids, 29 (67.4%) had third-degree and eleven had fourth-degree lesions. The hemorrhoids were not complicated. The average duration of symptoms was 11.36 months (range 6-20). Acceptability for the procedure was based on detailed simple explanation, comparing it with inpatient haemorrhoidectomy. Out of 57 patients that required haemorrhoidectomy over the study period, 14 preferred in-patient care, giving an acceptability rate of 75.4%. Forty (93%) of them were discharged home on the same day after a period of rest in the recovery area of the day care theatre ranging between 24 to 60 minutes with an average rest period of 41.2 \pm 11.1 minutes. All forty patients were discharged within 1 hour of operation. Three patients (7%) required inpatient admission, 2 on account of excessive pain and acute urinary retention, which was relieved by intravenous pentazocine and urethral catheterization. One had secondary haemorrhage which started on the fifth postoperative day. The two patients admitted for the control of pain stayed on the ward for 24 hours and were subsequently discharged without any further problems. The patient who had secondary haemorrhage was on admission for five days and required a course of antibiotics and blood transfusion. He did well and was subsequently discharged. Long term complications could not be

assessed because less than 20% of the patients were available for follow up after the first month following their operation. There was no mortality.

DISCUSSION

Day case haemorrhoidectomy is not a new concept. It has stood the challenge of time and currently, excision haemorrhoidectomy remains the most definitive treatment of the disorder. There is paucity of reports from the West African sub region. Operative treatment is indicated for third and fourth-degree haemorrhoids³. When done on in-patient basis, the postoperative pain associated with haemorrhoidectomy is better controlled. However, with judicious use of analgesics, stool softeners and antibiotics, the same level of postoperative pain control can be achieved⁴ after day case haemorrhoidectomy. Long term complications of day case haemorrhoidectomy compares favorably with those done on in-patient basis⁵, with the added advantage of short hospital stay.

In this study 43 patients had Milligan-Morgan haemorrhoidectomy under local anaesthesia with the intention of same day discharge from hospital. Forty (93%) of the patients were discharged the same day and within one hour of operation, this compares favorably with similar studies^{4,5,6}. Lam and colleagues⁷ reported 87% same day discharges in their series. The common complications of inpatient haemorrhoidectomy, acute urinary retention, reactive and secondary bleeding, sepsis, excessive pain, and anal stenosis are also common with day case haemorrhoidectomy. With careful attention to detail, good control of pain and judicious use of antibiotics the complication rate following day case haemorrhoidectomy is about 1-2%^{8,9}. The complication rate like in other studies was minimal and patient acceptability (number of patients who preferred day case over inpatient haemorrhoidectomy) was very high^{10,11}. The evaluation of long term complications however was not possible because of poor follow up. Virtually all the patients were lost to follow up by the end of two months after surgery. This makes it difficult to establish the incidence of anal stenosis following the procedure. One of the major complications of this procedure, excessive pain, if properly controlled by potent analgesics improves the overall outcome. Where there is excessive pain, the use parenteral analgesics including narcotics are advocated, subsequently, a non-steroidal anti-inflammatory drug is sufficient to control pain in the majority of patients. The analgesic protocol in all the patients involved the use of intravenous pentazocine perioperatively, followed by a five day course of oral diclofenac sodium. The pain associated with the first postoperative bowel motion can be very severe. That

is why some advocate keeping the patient in the hospital till the first bowel motion postoperative. With the infiltration of bupivacaine, administration of stool softeners^{13,14} and metronidazole¹⁵, the pain is reduced. This was achieved in this study by oral liquid paraffin and a high fiber diet. A regular regime of warm saline sitz bath was also very soothing. A good and reliable outcome measure is the number of patients who required inpatient admission for a planned day case procedure¹². Such unplanned admissions ranges between 1-5% in most series^{13,14}. This involved 3(7%) of our patients; comparable to findings from similar reports⁹.

The patient for day case haemorrhoidectomy is assessed in the same thorough manner as the one for inpatient treatment who will likely require a general or regional anaesthesia. Our patients were all seen in the out patient clinic. After a full history and physical examination, to rule out cardio-pulmonary and renal conditions, investigations including, haematocrit, urinalysis and chest radiograph and ECG where indicated were done. The patients were operated within 2 to 3 weeks of the last out patient visit. They came with accompanying persons with a ready means of transportation. Clear and simple instructions were given to the patients and their relatives on how to care for the operation site and what to do in case of any complication.

There was no mortality in this series which corroborates other studies^{9,10}. This study demonstrates the feasibility and safety of day case haemorrhoidectomy. Its clear benefits of very low complication rates, high patients acceptability and its affordability makes it a very attractive alternative to conventional inpatient care especially in developing countries.

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