

Haemorrhoidectomy under Local Anaesthesia: A Prospective Study



Medical Science

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ABSTRACT

Background: Haemorrhoidal disease is the most common of all anorectal diseases. Haemorrhoidectomy is considered the standard procedure for third and fourth degree haemorrhoids. This study is aimed to assess semi closed haemorrhoidectomy under pudendal block as day surgery procedure.

Material and Method: This prospective study was carried out on thirty patients. Patients with third and fourth degree haemorrhoids were included in the study. These patients were operated under pudendal block using 1% Lignocaine as local anaesthesia. In all patients semi closed haemorrhoidectomy was done. All patients were operated as day surgery procedure.

Results: Post operative symptoms like pain, bleeding, urinary retention, constipation, prolapsed of residual haemorrhoids, duration of hospital stay and quality of life were assessed with one month follow up. Twenty nine patients tolerated this procedure under pudendal block with minimum complications.

Conclusions: Semi closed haemorrhoidectomy under pudendal block is feasible, safe and well tolerated procedure in day surgery with minimum complications which can be managed easily.

INTRODUCTION

Haemorrhoids are the most common of all anorectal diseases. They are classified as external or internal depending on their position above or below the dentate line. The precipitating cause can be straining at defecation due to constipation, low residue diet, sphincter damage, pregnancy, portal hypertension, senile weakness of muscle supporting the veins, prostatism, sitting or standing for long time, hereditary predisposition, obesity, lifting heavy weight for long period, repeated diarrhoea and dysentery^{1,2,3}. The exact pathophysiology of haemorrhoids is not known but has been attributed to high resting anal pressure, intrinsic weakness of blood vessel wall, excessive arterial blood flow, secondary obstruction to outflow and increased intra abdominal pressure^{4,5}.

Many treatment modalities are available like dietary management, office procedures, day surgery procedures and surgical procedures which need hospitalization. Dietary treatment is the best for prevention and also as part of treatment of haemorrhoids. It includes high fibre diet, plenty of fluids and bulk laxatives². Most of haemorrhoids are amenable to office or outdoor procedures like rubber band ligation, injection sclerotherapy, photocoagulation, cryosurgery, infrared coagulation, laser therapy and herbal chemical cauterisation. These office procedures are acceptable to most of patients' also⁴.

Surgical options are the treatment of choice when conservative treatment has failed and for grade three or four haemorrhoids³. Conventional open haemorrhoidectomy devised by Milligan et³ is the standard operation for third and fourth grade haemorrhoids. However this open haemorrhoidectomy is associated with considerable post operative pain requiring long hospital stay and healing time^{3,4}. The attempt to reduce post operative pain following open haemorrhoidectomy, have led to modification in surgical techniques and preoperative treatment regimen. These modified techniques include haemorrhoidectomy with lateral internal sphincterotomy¹⁵, closed haemorrhoidectomy¹⁶, semi closed haemorrhoidectomy⁴, diathermy haemorrhoidectomy⁵, use of anal sphincter relaxants¹⁶ and transverse mucosal haemorrhoidectomy using a circular stapling device^{8,9}. These techniques can be done as day surgery procedures under local anaesthesia general and regional anaesthesia⁶ are associated with nausea, vomiting, hypertension, urinary retention and temporary motor weakness causing delay in mobilisation and discharge from hospital¹⁰.

Pudendal nerve block¹⁰ can be given in ischioanal fossa on both sides when pudendal nerve passes upwards and forwards

along lateral wall of ischioanal fossa through Alcock's canal, a sheath of obturator fascia. Single local anaesthetic like Lignocaine or combined with Bupivacaine are used^{18,19}.

The aim of this study is at evaluating feasibility, acceptability and post operative complications of semi closed haemorrhoidectomy under pudendal block in third and fourth grade haemorrhoids.

MATERIAL AND METHODS

This prospective study was carried out on thirty patients. Those patients having grade three or four haemorrhoids and second degree haemorrhoids with failed conservative treatment were included in this study.

Technique

Patient who was fit for surgery were called on the day of surgery. Patient was given enema in the morning. After cleaning and drapping, pudendal nerve block within Alcock's canal is given by infiltrating 10 ml of 1% of Lignocaine solution. Local infiltration is used around anus using another 5 ml of Lignocaine solution. The patient was operated with semi closed technique of haemorrhoidectomy. In this technique anal dilatation is carried out first. A haemorrhoidal mass is held with a tissue holding forceps. An incision is given at the base of the haemorrhoid; it is dissected upwards till it reaches the neck of it. It is transfixed and ligated using 1-0 vicryl. This haemorrhoidal mass is then excised. This raw area is covered with this mucosa by applying this transfixation vicryl suture to apex of raw area. This covers the raw area thus making it semi closed haemorrhoidectomy. This technique of ligation and excision of haemorrhoid can be repeated of other haemorrhoidal masses. All the patients were treated with this technique.

Symptoms in post operative period like pain, ease of evacuation, retention or incontinence, pruritis and discharge per anus were observed. The patients were discharged from hospital next morning if they were free from severe pain. All the patients were advised oral antibiotics and analgesics. Lignocaine 5% cream was given for local application for reducing pain during defecation. Bleeding episodes per day were calculated for first week. Healing time was noted on weekly follow ups. Time taken for return to work was noted. Follow up was done on weekly in out patient department.

RESULTS

Thirty patients gave consent for semi closed haemorrhoidectomy under local anaesthesia. Rest of patients suffering from haemor-

rhoidal disease were managed conservatively or by office procedure like band ligation. The age of patients varied from 25 to 65 years. Twelve of these were females while eighteen were males. The total duration of symptoms was 6 months to five years. These patients presented with grade three or four haemorrhoids, 75% of these were having prolapsed of haemorrhoids. In these patients, 23 haemorrhoids were at 3 o'clock position, 21 were at 7 o'clock and 18 were at 11 o'clock position. Only two patients had haemorrhoids with thrombosis. The duration of surgery varied between 15 to 30 minutes. The mean operative time was 22.5 minutes.

Out of thirty patients, five felt no pain but had discomfort only. Mild pain was felt by twenty patients, five had moderate pain and none of them felt severe pain. All the patients had normal continence before surgery and none of the patients had incontinence. Healing time was 7 to 10 days. Complete healing has occurred by 2nd week follow up. Episodes of reported by seven patients. It was mild in four patients and moderate in one patient. All these patients had reactionary haemorrhage and none had primary haemorrhage. At 4th week follow up no anal stenosis or loss of sphincter tone was identified. Duration of work loss was recorded. Patient resumed work at an average of seven days.

Twenty nine patients tolerated pudendal block anaesthesia during surgery very well. Only one patient was given general anaesthesia as he could not tolerate the surgery under local anaesthesia.

DISCUSSION

Local anaesthesia was first used postoperatively to control pain in form of ointment. Subsequently it was used for haemorrhoidectomy under local anaesthesia^{6,7}. Then in view of gynaecological procedures being done under bilateral pudendal block, it was considered that haemorrhoidectomy can well be done under pudendal block^{10,18}. A combination of pudendal block and local infiltration produces does not produces any per operative pain but produces long post operative analgesia^{18,19}. The other advantages include early ambulation and early discharge, early healing resulting in semi closed haemorrhoidectomy as day surgery. It reduces the cost of surgery and also encourages doctor patient relationship¹⁹. Most of our patients are from low economic strata, low cost of this semi closed haemorrhoidectomy and early return to work makes these patients to accept this form of surgery easily^{18,19}.

Some surgeons prefer spinal or general anaesthesia for haemorrhoidectomy as they achieve complete analgesia and muscle relaxation⁶. Studies have shown that adequate anaesthesia can be achieved using bilateral pudendal nerve block and local infiltration for this surgery when patients are medically fit and psychological prepared for this surgery^{10,18,19}. Both young and old patients tolerated this procedure very well.

Adequate post operative pain control and comfort after semi closed haemorrhoidectomy under pudendal block are key factors for practising this as day surgery. Local anaesthesia combined with intravenous injection of Tramadol produces adequate anaesthesia, analgesia and muscle relaxation, it avoids problems associated with general and regional anaesthesia. This form of local anaesthesia is sufficient for semi closed haemorrhoidectomy as day care surgery.

In this semi closed haemorrhoid, the raw areas are small, so the healing time is reduced generally about seven days. Semi closed technique provides adequate drainage to blood and serum so complications like seroma, haematoma, infection and abscess are avoided. This reduces the post operative pain¹⁵.

This study concludes that semi closed haemorrhoidectomy under pudendal nerve block and local infiltration of Lignocaine is well tolerated by patients and feasible as day surgery.

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