OUR INITIAL EXPERIENCE WITH MANUAL HEMORRHIDOPEXY – A NEW TECHNIQUE IN THE MANAGEMENT OF GRADE THREE HEMORRHoids
Praveen C.R¹, Kafle P², Shrestha S.J³

HOW TO CITE THIS ARTICLE:

BACKGROUND AND NEED FOR STUDY: Manual hemorrhoidopexy is a new technique proposed by Tagariello Carlo¹ (2011) for the treatment of hemorrhoids especially grade III. In contrast to the conventional excisional hemorrhoidectomy (Milligan-Morgan/ Ferguson) this novel technique, does not involve excision but plication with fixation of the prolapsing hemorrhoid. In the original study the new technique was not compared with any other techniques of treatment for hemorrhoids. This study compares the new method and the traditional Milligan-Morgan hemorrhoidectomy.

MATERIAL AND METHODS: A prospective study of patients who have undergone surgery for hemorrhoids over 2 years (from March 2011 to March 2013) was done in College of Medical Sciences Teaching Hospital (COMS-TH), Bharatpur, Chitwan, Department of Surgery. The patients who presented with third degree internal hemorrhoids on a random basis, underwent either conventional Milligan- Morgan hemorrhoidectomy (Group A) or Manual hemorrhoidopexy (Group B). The patients who had external hemorrhoids in addition to internal were excluded. Preoperative, intraoperative, and postoperative characteristics were evaluated. RESULTS: Group A included 37 patients (25 males) with mean age group 42 years underwent conventional Milligan-Morgan hemorrhoidectomy. Group B included 33 patients (20 males) with mean age group 40 years underwent manual hemorrhoidopexy. The patients in Group A had longer duration of surgery (42.2 min vs 25.2 min, p=.001), more postoperative pain as compared to Group B (8.18 vs 2.14, as assessed by the visual analogue scale, p=.014) and this was statistically significant. Most of the Group A patients had minimal post-operative bleeding. None of the Group B patient had postoperative bleeding. There was no significant difference among the other post-operative complications (eg Urinary retention). Mean hospital stay in Group A was 4.06 days as compared to 2.69 days in Group B (p =.002). Median follow up was 3 (1-4) months. None of the patients in either group had recurrence at follow up. CONCLUSION: Manual hemorrhoidopexy scores better then Milligan-Morgan method of hemorrhoidectomy with respect to duration of surgery, post-operative pain and hospital stay.

KEYWORD: Manual haemorrhoidopexy, haemorrhoid, Milligan –Morgan, haemorrhoidectomy.

INTRODUCTION: This study is about the latest technique described by Tagariello Carlo¹ known as manual hemorrhoidopexy. This technique is a non-excisional method of treating hemorrhoids. Tagariello Carlo proposes this method to be better than Doppler guided hemorrhoidal artery ligation and the Lango technique of stapler hemorrhoidectomy.¹ However there is no comparison with other surgeries for hemorrhoids. This study is to compare this new treatment with the conventional method (Milligan –Morgan) of hemorrhoidectomy.
MATERIAL AND METHODS: This is a prospective randomized study done in the Department of surgery and GI surgery, College of medical sciences, Bharatpur, Chitwan, Nepal. The study was approved by the hospital ethical committee. The study was done over a period of 2 years (from March 2011 to March 2013). The patients who presented with third degree internal hemorrhoids on a random basis, underwent either conventional hemorrhoidectomy (Group A) or manual hemorrhoidopexy (Group B). All the patients underwent proctoscopy and digital rectal examination (DRE). Flexible sigmoidoscopy was done in indicated cases (age > 50 years, new onset rectal bleeding, suspicious DRE). The patients who had external hemorrhoids in addition to internal were excluded. Those patients with thrombosed or strangulated haemorrhoids (Grade IV) were excluded from the study group. The patients who underwent banding for hemorrhoids were not included in the study as most of them were done as outpatient procedure, without any anaesthesia.

All the patient received enema preparation before surgery and received one dose of antibiotic 1 hour prior to surgery. All patients underwent surgery under standard spinal anesthesia. The duration of surgery (excluding anesthesia time) was recorded in each case. Post operatively patients received injection diclofenac given round the clock with additional intravenous injection tramadol as and when indicated. Post operative pain was measured at 4 hours post-operatively and every day till discharge. Visual Analogue scale was used to assess the severity of pain, score ranging from 0-10. A score of 0 was corresponds to no pain where as score of 10 corresponds to unbearable pain. All patients were assessed for any postoperative bleeding. In patients who had urinary retention catheterization was done in required cases. All patients were started on liquids followed by solid food on the day of surgery and IV fluids were restricted. The patients were discharged as soon as they felt comfortable and had no other indication for hospital stay. Patients were followed on an outpatient basis at 2, 4 and 8 weeks.

SURGICAL TECHNIQUE: Group A patients underwent the classical Milligan-Morgan method of hemorrhoidectomy. Group B patients underwent the original technique described by Tagariello Carlo1 without any modification. However we used suturing anoscope (Fig 1) instead of the beak proctoscope used by Tagariello Carlo1. Vicryl 00 thread was used. After identifying the prolapsed hemorrhoid, vicryl was applied on the fixed mucosa immediately above the hemorrhoid and then, without ligating, continued with a running stitch for a further three or four stitches terminating at least 1 cm above the dentate line. This results in correction of the prolapse as well as ligation of the hemorrhoidal vessels. Second line of sutures in a higher position to correct any remaining prolapse, were applied, in few cases.

Fig 1: Suture Anoscope used in our study.
DATA COLLECTION AND ANALYSIS: All the data including medical history, peri-operative characteristics, post-operative pain score, requirement of post-operative analgesic and post-operative symptoms data were analyzed using computer base SPSS system for windows-7. P-values less than 0.05 were considered statistically significant.

RESULTS: 37 patients underwent conventional (Milligan-Morgan) hemorrhoidectomy (Group A) and 33 patients underwent manual hemorrhoidopexy (Group B). Male patients were predominant in both groups. There was no significant difference between the two groups with respect to age, sex distribution and duration of symptoms (Table 1). Manual hemorrhoidopexy is a relatively faster technique compared to the conventional technique (25.2 min vs 42.2 min, p=.001). The patients in group A had more postoperative pain as compared to group B (8.18 vs 2.14, as assessed by the visual analogue scale, p=.014). Most of the Group A patients had minimal post-operative bleeding. None of the Group B patient had postoperative bleeding. There was no significant difference among the other post-operative complications (e.g. urinary retention). Patients who underwent manual hemorrhoidopexy had a significant shorter hospital stay (2.69 days vs 4.06 days in Group A, p =.002). Mean follow up was 3 (1-4) months. Variables related to clinical features, demographic features, features related to surgery are summarized in the table one.

Table 1: Demographic clinical features and perioperative variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group A(n=37)</th>
<th>Group B(n=33)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Mean) years</td>
<td>42</td>
<td>40</td>
<td>0.08</td>
</tr>
<tr>
<td>Sex (Male/Female)</td>
<td>25/12</td>
<td>20/13</td>
<td>0.72</td>
</tr>
<tr>
<td>Symptom duration</td>
<td>9 months– 38 months</td>
<td>6months– 42 months</td>
<td>0.68</td>
</tr>
<tr>
<td>Duration of operation</td>
<td>42.2 min</td>
<td>25.2 min</td>
<td>0.001</td>
</tr>
<tr>
<td>Post-op pain (VAS)</td>
<td>8.18</td>
<td>2.14</td>
<td>0.014</td>
</tr>
<tr>
<td>Hospital stay (days)</td>
<td>4.06</td>
<td>2.69</td>
<td>0.002</td>
</tr>
</tbody>
</table>

DISCUSSION: Tagariello Carlo1 in his study from March 2006 to June 2008 did manual hemorrhoidopexy in the treatment of hemorrhoidal disease for 67 patients (36 males; mean age 48.6 years) with grade III hemorrhoids. He had excellent results with respect to post-operative pain. Manual hemorrhoidopexy avoids incision into sensitive anoderm and skin below dentate line therefore lessens the pain and results in shorter hospital stay.

However in his study there was no comparison with any other technique. However he is of the opinion that this method is better than Doppler guided hemorrhoidal artery ligation and the Lango technique of stapler hemorrhoidectomy. In contrast to these two techniques his method also addresses the prolapse pathology in addition to the dilated veins. In majority of his (91%) patients, the hemorrhoidal prolapse was resolved at mean follow-up, while the rest had reduced prolapsed to acceptable level. 91.8% of his patients had bleeding symptoms resolved while the remaining there was significant reduced frequency1. We also found similar satisfactory results in our study though over 2 years. We now do hemorrhoidopexy in most of the grade III hemorrhoid patients. We have used this technique with good results in few symptomatic grade II hemorrhoid patients, though we have not included them in the present study.
The Milligan-Morgan technique described in 1937 has good response rates with respect to recurrence and its efficacy has been documented in various studies. However because of delayed healing rates and prolonged morbidity is a cause of concern.²⁻⁴

In a meta analysis comparing various hemorrhoidal treatment modalities by MacRae HM and MacLeod RS³ banding was recommended as the initial mode of therapy for grade 1-3 hemorrhoids. Hemorrhoidectomy was found to be associated with more complications and pain, though it was associated with better response rates.⁵ Banding does carry the rare risk of post-banding sepsis requiring aggressive treatment with antibiotics and surgical drainage.⁶ We have however not compared the new technique with banding.

Hemorrhoidopexy is simpler technique and easy to learn. It can be done without the need for any energy device. As it is a non-excisional technique, it easily scores better with respect to pain and post-operative morbidity. Patients do complain of discomfort or heaviness as described in the original study¹ which can be taken care of with the usual analgesics like injection Diclofenac. In the original study as well as ours there were no recurrences. However long term studies are required to confirm this observation. Studies are also required to compare this technique with banding.

REFERENCES:

AUTHORS:
1. Praveen C.R.
2. Kafle P
3. Shrestha S.J.

PARTICULARS OF CONTRIBUTORS:
1. Lecturer, Department of General Surgery, College of Medical Sciences, Bharatpur, Chitwan Dist, Nepal.
2. Resident, Department of General Surgery, College of Medical Sciences, Bharatpur, Chitwan Dist, Nepal.
3. Resident, Department of General Surgery, College of Medical Sciences, Bharatpur, Chitwan Dist, Nepal.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Praveen C.R,
Sapthagandaki Chowk,
In front of CMS Medical College,
Bharatpur, Chitwan, Nepal.
Email – praveencsr2007@gmail.com

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