A POSSIBLE ALTERNATIVE TO HAEMORRHOIDECTOMY
SHORT STAY PROCEDURE FOR THE TREATMENT OF HAEMORRHoids

SYNOPSIS

Eighty three consecutive patients, who underwent Lord's procedure for the treatment of piles, have been followed up from 6 months to 52 months, and were subjected to a questionnaire (Form 1) and the results analysed by computer. The indications of this procedure are limited; these have been clearly outlined and the technique is described with suggested modifications.

A simple instrument has been used for measurement of rectal pressure in these patients and the findings compared.

The analysed results show that 84.8% of patients were cured or satisfied, although complete absence of symptoms was only obtained in 33.8%.

This paper is based on subjective as well as objective assessment, by patients and the author of the treatment by manual dilatation.

INTRODUCTION

Lords has postulated that haemorrhoids are reversible and tend to disappear as soon as the cause is removed.

He suggested that the enlargement and congestion of internal haemorrhoidal plexus is due to inelastic pecten bands in the lower rectum and anal canal (Fig. 1). The rectal pressure increases during defaecation, especially with hard stools.

The congested haemorrhoids should return to normal if the narrowed segment is removed, which is achieved by rupturing the bands during dilatation.

MATERIAL

Eighty three patients were studied with a questionnaire. They had undergone dilatation treatment for haemorrhoids between May 1972 and January 1977.

Sixty-eight patients returned the completed questionnaire, fifteen patients either did not fill in the form properly, or failed to return the form, and thus were not included in the study.
"Study of Lord's Treatment for Haemorrhoids"

PLEASE READ THE INSTRUCTIONS CAREFULLY BEFORE COMPLETING THIS QUESTIONNAIRE

Name .................................. Hospital Number ..........................
Address ..................................

Hospital No. ..........................

1. Are you a female? [ ]
2. Age [ ]
3. Does your occupation require that you spend the majority of time on your feet? [ ]
4. Were you referred by Casualty? [ ]
5. Reasons for consulting the Doctor - in order of priority:
   Irritation [ ]
   Bleeding [ ]
   Pain [ ]
   Prolapse (piles came down) [ ]
   Discharge [ ]
   Other [ ]
6. Duration of major symptom:
   Irritation [ ]
   Bleeding [ ]
   Pain [ ]
   Prolapse [ ]
   Discharge [ ]
   Other [ ]
7. Who told you about Lord's Treatment? (dilatation)
   Friend 1
   Own Doctor 2
   Read about it 3
   Other 4
8. Date of Operation: ..........................
9. Post-operative complications: Immediate - in order of significance
   Pain [ ]
   Bruising [ ]
   Splitting [ ]
   Bleeding [ ]
   Prolapse [ ]

10. Delayed:
   Inability to hold wind [ ]
   Duration - Months [ ] Days [ ]
   Did you stain your briefs? [ ]
   Duration - Months [ ] Days [ ]
11. Did you take any tablets or antibiotics after the operation? [ ]
12. Did you follow-up post-operative instructions? [ ]
   Dilatation [ ]
   Normacol or Bran [ ]
13. Could you have returned to work? [ ]
   On same day [ ]
   OR On second day [ ]
14. Remarks on operation:
   *Excellent (no complaints 1
   *Good (symptomless, prolapse) 2
   *Satisfactory (occasional symptoms, but no worry) 3
   *No benefit 4
15. Did you require further treatment?
   Dilatation [ ]
   Surgery (haemorrhoidectomy) [ ]
16. Remarks or comments on treatment

Overall consideration was given after looking through the follow-up clinical notes of all the patients.

SURGICAL TECHNIQUE

Patients are admitted to hospital the day before the procedure, and soap and water enema is given.

Under general anaesthesia and lithotomy position, a sigmoidoscopy is done to exclude any lesions in rectum or lower sigmoid (Fig. 2), and base line rectal pressure is taken.

The key of the procedure is to feel the pecten bands, which is achieved by introducing the gloved left index finger well in the anal canal and lifting upwards, while the gloved right index finger is run into rectum pressing downwards, and moving slowly. The bands will be felt to roll underneath the finger (Lord, 1968).

It has been found that this may not be so in all cases, especially in inexperienced hands. These patients have invariably very tight anal sphincters, and as one stretches, a "give way" feeling is felt. Whether this is due to stretching of pecten bands or not, one cannot be sure.

When these bands have been felt, they are gradually stretched until they give way. This may require considerable force. It is important that the dilatation extends and includes the anal canal and lower rectum, and it is necessary to continue the stretch until 4 fingers of both hands reach well in;

dilatation should be achieved mostly in lateral quadrant (Fig. 3).
The manipulation has been described by Sames (1972) as like "ironing out the perineum to deliver the foetal head".

Rectal pressure is taken again.

A cetavlon moistened sponge (6" x 3" x ½") is put into the lower rectum and anus.

It has been suggested that the sponge is removed the same evening, but it is preferable to leave the sponge till the next morning when generally the patient would pass it out.

On the next day, after the patient has had a hot bath, the lubricated dilator (Fig. 4) is passed under supervision and kept in position for a minute, and then slowly removed.

He is sent home with the instruction sheet (Form 2).

The Bran dosage must be followed by trial and error, and should be taken with plenty of fluid. Once regular habit is established, Bran can be discontinued, but it is preferable to keep them on Bran indefinitely.

PROCEDURE OF RECTAL PRESSURE MEASUREMENT

A simple device made by the author, has been used. This consists of a rubber balloon, capacity
INSTRUCTIONS IN THE USE OF THE DILATOR
IN THE TREATMENT OF HAEMORRHOIDS

The dilation treatment for piles is based on the knowledge that most troubles in that region are due to the back passage being too tight. This may or may not be associated with the passage of hard difficult motions.

The aim of the treatment is to stretch the back passage and to keep it stretched and to try and regulate the motions so that they are soft and bulky. The first part of the treatment is carried out in the operating theatre under general anaesthetic. The second part of the treatment is carried out by the patient and consists of using a special anal dilator and Bran.

Use of the dilator
The dilator must be passed to its fullest extent and left in position for about one minute.

1. The dilator is passed once every day for fourteen days after the operation followed by
2. Every other day for two weeks, followed by
3. Twice a week for two weeks, followed by
4. Once a week for two weeks, followed by
5. Once a month for six months.

Many patients find that the most satisfactory way to use the dilator is to have a hot bath, let the water out, insert the well lubricated dilator, and then to have a final wash after removing it. If, when the dilator is passed less often the back passage is tender, or there is any difficulty, the dilator should be passed daily for a week until the condition settles.

Use of Bran
One teaspoonful of Bran is swallowed first followed by three quarters of a pint of tepid water which must be drunk. The water causes the Bran to swell up producing a soft bulky motion. The dosage required is extremely variable, some patients requiring only one teaspoonful of Bran a day, others needing two teaspoonfuls twice a day. Each individual patient must arrive at his own dosage by experiment. It is suggested that one teaspoonful in the morning should be tried in the first instance and adjusted from there.

of 35 mls, connected to a hollow tube which has a 3 side-holes. One end of the tube is sealed, and the other end connected to a standard C.V.P. Line (Fig. 5). Water is tinted with Methal Blue.

The water level in the C.V.P. Line is adjusted to the patient's position (height of rectum). The balloon was lubricated and inserted into the rectum and change of pressure recorded.

RESULTS OF RECTAL PRESSURE STUDIES
(Charts I, II and III)

Control rectal pressure varied from 25 to 50 mm of water.

Although post-dilatation rectal pressure varied in patients between 25 to 60 mm of water, they all remained symptom free.

The pre-and immediately post-stretch rectal pressure, showed very clearly that the pressure dropped to approximately 10 mm of water.

Unfortunately these studies do not confirm that after Lord's Treatment the rectal pressure will remain low. Better electronic device, for similar studies, should be carried out.

ANALYSIS OF RESULTS

Out of the 68 patients who were accepted in this study, 59% were males and 41% females (ages between 36 years and 59 years). The main presenting symptom was bleeding in 51% of cases, and pain in 49% of cases.
CONNECTED WITH STANDARD C.V.P. LINE
WATER TINTED WITH METH: BLUE.

Fig. 5. Diagramatic representation of measuring device for rectal pressure.

CHART NO. 1
"CONTROL OF PRESSURE STUDIES UNDER GENERAL ANAESTHETIC WITH ORDINARY CONDITIONS"

<table>
<thead>
<tr>
<th>NUMBER OF PATIENTS</th>
<th>Pressure (mm Hg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>45</td>
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<tr>
<td>3</td>
<td>40</td>
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<tr>
<td>4</td>
<td>35</td>
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<td>5</td>
<td>30</td>
</tr>
</tbody>
</table>

Patients under General Anaesthetic no Relaxants}
Pressure- under Ordinary Conditions
CONTROL
Results were classed into:
1. Excellent result (completely symptom-free and no recurrence)—33.8%.
2. Good results (symptom-free, but occasional bleeding)—16.2%.
3. Satisfactory (where they had infrequent bleeding and pain)—36.8%.
4. Failure, but benefited by further self dilatation only—10.3%.
5. Further operation (Haemorrhoidectomy)—2.9%.

Post-operatively, pain lasted for one to three days, and most of them were back to work within 4 days.

DISCUSSION
The incidence of haemorrhoids in general population is as yet unknown, but Buie in 1960 from the Mayo clinic reported an incidence of 52% in a series of unselected patients (Steinberg et al., 1975).

Methods of treatment of haemorrhoids date back from Babylonian and Hippocrates era, varying from cautery, injection to excision.

Presently in this country conservative methods of treatment in the form of rubber band ligation and manual dilatation (Barron, 1963, Lord, 1968 and Groves et al., 1971) are popular.

This method of treatment is based on the belief that haemorrhoids are caused by narrowing of the lower rectum and/or anal canal, which interferes with the normal process of defaecation, leading to a rise of intrarectal pressure, and thus causing venous congestion leading to haemorrhoids.
Ernest Miles (1919) first documented the narrowing of anal canal associated with internal haemorrhoids. The extract from his paper is well covered by Ford (1972). Pecten bands do not exist in a healthy anal canal.

The indications of Lord's procedure are late 2nd degree or 3rd degree piles and strangulated prolapsed haemorrhoids. The author recommends this treatment for anal fissure and following left colectomy.

It is essential to disrupt all the pecten bands. High rectal bands are only felt after the lower bands have been stretched. The dilatation must be gentle, and the stretching is spread out over the 4 quadrants of the anal orifice, rather than lateral sides only.

Cetavlon moistened sponge is put in the rectum/anal canal to reduce haematoma formation.

From this study it is clear that by this procedure 95% of the patients, who would normally be subjected to haemorrhoidectomy and may need hospitalization for 7-10 days, got similar results by this short-stay method.

This by itself is a considerable saving in time and hospital beds. The morbidity is also considerably lower. The actual time off-work is much shorter.

This method is comparable to the rubber band ligation method (Steinberg et al, 1975) in result, does not need any special instrument and can be performed on an Outpatient basis.

However it is liable to fail in patients with lax anal sphincter and severe constipation, and should not be used in patients with 1st degree piles or patients with any degree of rectal prolapse.
COMPLICATIONS AND SEQUELAE

1. Anal Epithelia Tear—does not need any treatment and need not delay dilatation.
2. Local Bruising and Perineal Haematoma—certain amount of bruising is common, but haematuria, though rare, has been encountered.
3. Incontinence—this is one of the most important complications to be considered. Though not common when used for 3rd degree piles, it has been seen more frequently after this procedure for fissure in ano. Initially one hesitated to do this procedure in the elderly, but slowly this restriction has been lifted and patients over 80 years had no incontinence after treatment. When incontinence does occur, re-education with re-assurance will help in most cases. Bran is withdrawn and Codeinephosphate is prescribed. Use of dilator is stopped and perineal exercises are started.
4. Prolapse—this is seen in right anterior position, and in fact the patient may become very unhappy because of the discomfort of moistness. But on inspection the mucosa is pink and flaccid, and not blue and tinged. Most of these disappear spontaneously and patient should be reassured. If the prolapse persists, Lord has devised a special clamp to remove these as well as skin tags. Author did not have to use this in any of his cases.

5. Bleeding—post-operative bleeding has not been a problem and no patient had to be taken back to the operating theatre because of this.

CONCLUSION

Although the series is small, and follow-up period not very long, the author believes that this procedure may be a better alternative to rubber band ligation or formal haemorrhoidectomy. Further trials are justified.

REFERENCES