Ambulatory Management of Haemorrhoids by Rubber Band Ligation

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Objective: To evaluate the efficacy of rubber band ligation for the management of internal haemorrhoids. **Study design:** A prospective randomized study. **Place and duration of study:** Department of Surgery Lahore General Hospital conducted from April 1999 to June 2002. **Subject/Methods:** One hundred and eighty patients with II & III degree haemorrhoids were treated with rubber band application. **Results:** About 562 band applications in 255 sessions were made. Follow up ranged from 3 to 50 months with a median follow up of 19 months. The common post procedural complaints were anal discomfort (78 patients), proctalgia (24 patients) and soiling (12 patients). The overall success rate of RBL was 91.7%. **Conclusion:** Ambulatory RBL should be considered as a safe and effective treatment for 2nd and 3rd degree symptomatic haemorrhoids and is associated with low morbidity.

Key Words: RBL-Rubber band ligation

Haemorrhoids are generally a chronic problem and tend to worsen with time.[1] Most patients have several episodes during their lives; however it can be considered a benign disorder and approximately 80% of patients do not require surgery for the alleviation of their symptoms.[1] Rubber band ligation is one of the most commonly used outpatient procedure.[2] To evaluate the efficacy of rubber band ligation for haemorrhoid management this study was carried out in the department of surgery Lahore General Hospital, Lahore.

Materials and methods

One hundred and eighty patients with II & III degree haemorrhoids were treated with rubber band application in the outpatient department between April, 1999 and June, 2002. Patient was placed in the left lateral position. Digital rectal examination and proctoscopy was performed for the pre-procedural evaluation of the disease. One or two rubber bands were loaded onto the drum of the banding instrument, using the loading cone. The lubricated proctoscope was inserted into the anus and guided into position with the relevant haemorrhoid prolapsing over the rim of the proctoscope. The grasping forcep was threaded through the drum of the banding instrument and the haemorrhoid was grasped at least 7mm above the dentate line. Whilst the other hand was used to grip the ligator, its drums was passed over the haemorrhoid ensuring that the dentate line was at least 2mm below the drum. The trigger mechanism was compressed to release the band or bands onto the haemorrhoid. No bowel preparation, anesthesia or sedation was required. At a time a maximum of two haemorrhoids were banded and patients were asked for the follow up after ten days for the next session.

Results

Rubber band ligation was performed in 180 patients and about 562 band applications in 255 sessions were made. Follow up ranged from 3 to 50 months with a median follow up of 19 months. One to three bands were placed per treatment sessions. Bleeding was the most common presenting complaint (98 percent). The mean age was 43+/-14. The ratio of male to female was 102:78 and the ratio of 2nd degree to 3rd degree hemorrhoid was 153:27. The common post procedural complaints were anal discomfort (78 patients), proctalgia (24 patients) and soiling (12 patients). All of these complaints were alleviated within a week after treatment without requiring further management. At a mean follow up of 19 months a total of 15 patients' complaint of persistent haemorrhoids and ultimately underwent haemorrhoidectomy. The overall success rate of RBL remained 91.7 percent.

Discussion

More than 80% of anorectal surgical conditions can be dealt successfully on an ambulatory basis.[3] Ambulatory proctology is till now much underestimated discipline, which is out of interest of big surgeons. But it is a very important field due to incidence of proctological affections and severe social consequences of their inappropriate diagnosis and treatment. Rubber band ligation is effective in the treatment of symptomatic hemorrhoids.[2,5,6] Rubber band treatment works effectively on internal haemorrhoids that protrude during defecation. The procedure sometimes produces mild discomfort and bleeding, but it is generally the treatment of choice for patients who have haemorrhoids and for whom haemorrhoidectomy is considered too radical, or when the patient specifically wishes to avoid surgical excision.[7,8] Santiago E et al [9] in a study of two hundred ninety five patients treated with RBL found this treatment effective in 98 percent patients after 180 days and very good after 36 months and he came across 6/295 relapses at 36 months (2%). These results were even better if compared to 8.33% failure rate found in this study. Sclerotherapy is one of the older methods of the other widely used conservative treatment of 1st and 2nd degree haemorrhoid. . Kanellos et al [10] in their study found sclerotherapy effective for the 1st degree haemorrhoids but he found sclerotherapy an inappropriate method of treatment for 2nd degree haemorrhoids. Injection sclerotherapy alone or in combination with RBL is recommended by many authors for the treatment of both 1st and 2nd degree haemorrhoids. [11,18] Several clinical

practice guidelines[12,13] and meta-analysis[14,15] have recommended the non-surgical procedures for 1st to 3rd degree haemorrhoids. Although there is some discrepancy about the procedure of choice, rubber band ligation appears to be the most effective technique. An evidence-based clinical practice guideline[12] has recommended coagulation techniques for bleeding non-prolapsed haemorrhoids or those with a low grade prolapse (1st and 2nd degree), and reserving rubber band ligation for haemorrhoids more severely prolapsed (3rd degree). The basis for this recommendation is that flat bleeding haemorrhoids may not provide enough tissue to grasp. However in our view this is an approximate rather a rigid approach and the final decision should depend on the surgeon's technical training, the patient's preferences, clinical circumstances, and local resources.

Conclusion

Ambulatory RBL should be considered as a safe and effective treatment for 2nd and 3rd degree symptomatic haemorrhoids and is associated with low morbidity. Recurrence is uncommon and is cost effective for the patient.

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