REVIEW ARTICLE

Haemorrhoids: a doctor's dilemma

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Summary

The different forms of treatment for haemorrhoids are described. These include conservative therapy, elastic band ligation, sclerotherapy, cryosurgery, anal dilatation, lateral sphincterotomy and formal surgery. Controlled trials comparing these methods of treatment indicate that surgery should be rarely performed. Of the remaining methods available, elastic band ligation or anal dilatation are recommended.

Introduction

The different forms of treatment for haemorrhoids have, in principle, changed very little through the centuries, and controversy continues to exist. Hippocrates described cutting, excising, sewing, binding and cautery (Graney and Graney, 1980) as alternative forms of treatment. This can be compared to the leader in the *Lancet* 'to tie, to stab, to stretch; perchance to freeze' (Editorial, 1975). What is apparent is that haemorrhoids are common. Estimated incidence is quoted at 50% of the population over the age of 50 years (Goligher, 1977). Thus, this common condition presents a serious cause of suffering and interferes with the lives of a large section of society. It also brings large numbers of patients to the surgeon and to the operating table.

Forms of treatment

The vast majority of haemorrhoid sufferers are invariably cured by a conservative regime. This consists primarily of correcting bowel habits and the use of suppositories containing an anti-inflammatory agent. However, the problem remains as to which of the available forms of more active treatment should be chosen in those patients in whom symptoms persist.

The most widely used operation is that described

by Milligan *et al.* (1937) where each haemorrhoid is transfixed, ligated and excised and the defects in the perianal skin are allowed to granulate. It is associated with considerable pain and discomfort and the patient is often unable to work for up to one month. This follows an in-patient stay of around one week.

Between conservative treatment and actual surgery, there are several less distressing methods available, each with their advocates. The results of these different methods compare well with the results of surgery.

Sclerotherapy using 5% phenol in almond oil has been found satisfactory for first degree and early second degree haemorrhoids (Dencker *et al.*, 1973). Elastic band ligation, described by Barron (1963), achieves good results even in third degree cases (Steinberg, Liegeois and Williams, 1975). Cryosurgery, first described by Lewis, Dela Cruz and Gazzaniga (1969), has not become very popular, and has stimulated some opposition to its use (Ross and Bernstein, 1975). Anal dilatation described by Lord (1968) has been widely used in Britain although it is less popular in the U.S.A. Lateral subcutaneous sphincterotomy for haemorrhoids was advocated by Eisenhammer (1959) but others found a high incontinence rate (Allgower, 1975) or poorer results when compared to elastic band ligations (Arabi *et al.*, 1977).

Comparison of treatments

With several methods available for treatment of a condition, the doctor must decide which of the methods is most suited to his patient. Clearly a less radical approach is preferable to a radical one if the results are comparable, or even slightly inferior.

There are few controlled trials which have examined different forms of treatment for haemorrhoids, and certainly very few in relation to the frequency of the condition, and the number of operations performed for it. Chant, May and

Wilken (1972) compared anal dilatation to haemorrhoidectomy in 54 patients, which suggested no difference between the procedures for pain and bleeding, although haemorrhoidectomy was slightly better for prolapse. Anscombe, Hancock and Humphreys (1974) treated 100 patients in a similar trial. The patients were questioned at 6 months, and asked to give opinions as to the success of the treatment. After anal dilatation, 84% were satisfied with the results of treatment, as against 98% of those patients after haemorrhoidectomy. However, time in hospital, time off work, and complications were all significantly less in the anal dilatation group. Hardy, Wheatly and Hefferman (1975) found that haemorrhoidectomy gave slightly better results at one year.

Jones and Schofield (1974) examined elastic band ligation in addition to anal dilatation or haemorrhoidectomy in a controlled trial of 300 patients. They examined the complications occurring and, although different, the number of patients having complications in each group was similar. Final results assessed by the patient himself at 6 months showed satisfaction in treatment outcome in 95% of cases after haemorrhoidectomy, 92% after elastic band ligation and 91% following anal dilatation. There was no significant statistical difference between the methods. When the groups were divided into those above and below 55 years, elastic band ligation was preferable to anal dilatation in patients above 55 years, whereas anal dilatation was superior in those below 55 years.

Hood and Alexander-Williams (1971) compared anal dilatation in a random trial of 53 patients. Assessment was made by questionnaire to which 47 patients replied. Questions were related to post-treatment pain, loss of work, present symptoms and overall assessment of treatment. A significantly greater percentage of patients were rendered symptom-free following elastic band ligation as opposed to anal dilatation, at one month. In addition, there was no significant difference between the amount of discomfort caused by the 2 procedures.

Arabi *et al.* (1977) preferred elastic band ligation to sphincterotomy in 100 patients, and Clarke, Giles and Goligher (1967) found it more effective than sclerotherapy in 60 patients. Dencker *et al.* (1973) compared elastic band ligation to injection therapy and haemorrhoidectomy in 243 patients. They concluded that elastic band ligation was equal to surgery, although results of sclerotherapy were inferior to both. Smith, Goodreau and Fouty (1979) compared cryosurgery to closed haemorrhoidectomy in 26 patients, each receiving both forms of treatment. Most preferred the surgical method to cryosurgery.

More recently, Keighley *et al.* (1979) performed a controlled trial on 216 patients. They all had measurements made of anal pressures. The high anal pressure group were subjected to diet alone with bran tablets, anal dilatation or a lateral subcutaneous sphincterotomy. Anal dilatation gave better results at one year than diet or sphincterotomy. The low pressure group were randomized to rubber band ligation, cryosurgery or diet. The results of rubber band ligation were superior to the other 2 methods. This trial has attempted to tailor the appropriate procedure to each particular group of patients.

In a retrospective study, Jeffery *et al.* (1980) compared elastic band ligation alone in 134 patients as against a combination of banding and injection in 161 patients. In the combination group, 29% required 2 or more sessions as against 38% in the ligation group. There was also a slightly higher post-treatment bleeding rate in the ligation only group. Follow-up by replying to a questionnaire was obtained in 260 of the 295 patients. Twenty-eight and 29% respectively required a further course of treatment for their haemorrhoids. Over 25% of the total group had residual symptoms for which no treatment had been sought. This was stated to be similar to the symptoms found after haemorrhoidectomy. The study confirmed that rubber band ligation is an effective out-patient treatment for haemorrhoids although a long-term prospective trial of different out-patient methods is recommended.

Murie, Mackenzie and Sim (1980) compared rubber band ligation to haemorrhoidectomy in 3rd degree haemorrhoids in 100 patients. They found no significant difference between the 2 methods of treatment at one year follow-up. In the present authors' own 2-year follow-up of 80 patients treated by anal dilatation, 89% were satisfied with the results of treatment.

Conclusions

When examining these controlled trials, it becomes apparent that there are very few indications for surgical treatment of haemorrhoids today. Elastic band ligation offers a method which is associated with little discomfort although there may be some discharge for up to 4 weeks. It may also require repeated out-patient sessions but there is minimal loss of work. Anal dilatation is a very satisfactory form of treatment but requires general anaesthesia for its performance. Perhaps a further study of anal pressures would suggest which one of these 2 forms of treatment is more suitable for a particular patient or in the presence of a specific anal pressure.

By substantially decreasing radical surgery for

haemorrhoids, many patients will avoid an unpleasant and painful operation. There will also be a considerable saving in health service expense and in lost work days.

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