serosa dips in. Certain observations, however, indicate that there is in addition a structural arrangement to account for the permanence of a haustral cleft. Longitudinal fibres towards the periphery of a tænia suddenly change direction and, interlacing with the most peripheral longitudinal ones – often in relation to blood vessels and accompanied by elastic fibres – course towards and fuse with the main circular muscle layer. Secondly, there is an additional thin sheet of flat circular muscle bundles situated just internal to but independent of the main circular muscle layer; within these bundles are numerous large round structures of a collagenous nature. Thirdly, there is, on the submucosal edge of the circular muscle bundles, an elastic layer formed by a condensation of thick, dark-staining elastic fibres. These three features are more marked in the proximal colon where the permanent type of haustral cleft is the more common; that they are in some way associated with the formation of permanent haustral clefts seems at least likely.

A New Regime for the Treatment of Hæmorrhoids

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This is a preliminary communication because the longest follow up is three years and the treatment is empirical, but so far no patient who has been discharged apparently cured has come back with a recurrence of symptoms. It is believed that this treatment is directed against the cause of hæmorrhoids in sharp contrast to hæmorrhoidectomy, the rubber band treatment, injection treatment, and local applications, all of which are directed against the hæmorrhoids themselves.

The treatment: The patient with third-degree hæmorrhoids is seen in the clinic, a history is taken and the usual examinations carried out to make sure no other disease is present. The patient is then admitted, usually on the same day, to the hostel ward where he is prepared for theatre. In the anæsthetic room he is given an injection of propanidid and the moment he is asleep a forcible digital dilatation of the anal canal and lower third of the rectum is performed. It is difficult to prescribe the degree of stretch but the aim is to dilate sufficiently to allow the four fingers of both hands to be inserted well into the lower rectum. In a favourable case a band or bands are felt to give way. These bands are situated superficially at the anal orifice, around the anal canal itself or around the lower third of the rectum. Many patients have more than one band. After the dilatation a moistened sponge is inserted into the anal canal. This exerts gentle pressure on the walls and prevents hæmatoma formation. The patient goes back to the hostel ward and an hour later the nurse removes the sponge. After recovery from the anæsthetic the patient is allowed home and is expected to return to normal activities within two days. He takes with him a dilator, a packet of Normacol and a card printed with the following instructions:

The dilatation 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 to 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 anæsthetic. The second part of the treatment is carried out by the patient and consists of using a special anal dilator and Normacol.

Use of dilator: The dilator must be passed to its fullest extent and left in position for about a minute.
(1) The dilator is passed once every day for fourteen days after 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 being 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 Normacol or Normacol Special: The granules are swallowed first and afterwards ½ of a pint (350 ml) of tepid water must be drunk. This water causes the granules to swell up and the resulting gel is passed through the bowels producing a soft and bulky motion. The dosage required is extremely variable, some patients requiring only a few granules a day. Others need two teaspoonfuls twice a day. It is suggested that one teaspoonful in the morning should be tried in the first instance and adjusted from there.

Follow up: The first follow up is at two weeks and if the patient is symptom free he is discharged; if not, he is seen again at two months for reassessment. Long-term follow up is achieved by questionnaires.

Complications: The two obvious and daunting possible complications of this forcible dilatation are incontinence and prolapse. This procedure has been carried out on over 250 occasions and no patient has been rendered incontinent. This statement requires slight qualification in that if patients

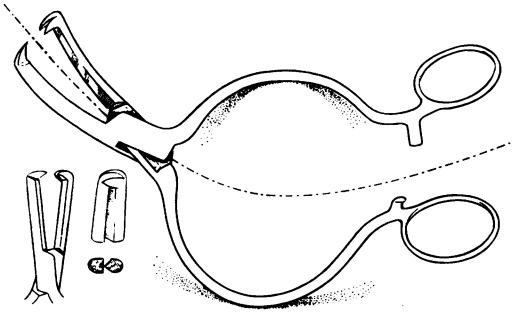

Fig 1 *The hæmostatic clamp (A L Hawkins Ltd). For description see text*

are questioned some will say that they noticed poor control of flatus for several weeks after the dilatation and that if the bowels become very loose there is a little seepage and soiling but this is easily corrected by withdrawing the Normacol.

It can also be stated that no patient has developed true rectal prolapse as a result of this regime but this statement requires rather more qualification. About one in 5 of those who have had advanced third-degree hæmorrhoids are clearly disappointed when they come back for follow up. They report that the bowels work freely and easily, that there is no pain and no bleeding but that they have a 'pile' which comes down and has to be replaced. Furthermore, whereas before the dilatation when the piles were replaced they stayed back, ever since the dilatation there is much more tendency for the prolapse to recur during normal activities and this prolapse causes a good deal of moistness and discomfort. Examination reveals a mucosal prolapse, usually in the position of the right anterior hæmorrhoid. As far as the patient is concerned the distinction between a prolapsed hæmorrhoid and mucosal prolapse is academic but it is suggested that this distinction is significant and that the large right anterior hæmorrhoid has indeed shrivelled up but that it has left redundant mucosa which now prolapses. A special clamp has been designed to deal with this residual problem (Fig 1). It has hæmostatic jaws and is curved to the shape of the buttocks. It is applied across the base of the redundant mucosa which is then removed. The patient is then sent back to the ward with the clamp held in position with zinc oxide strapping. An hour later the clamp is removed, there is no bleeding and the patient goes home. This rapid procedure is again carried out under propanidid anæsthesia.

This treatment has now been generally adopted within the High Wycombe Hospital Group and Table 1 shows that despite an appreciable increase in the number of new patients seen in the surgical clinics during the past three years there has been a dramatic drop in the number of hæmorrhoidectomies carried out. It is not anticipated that hæmorrhoidectomy will be completely eliminated as there are a few patients who, although improved by the regime, still have hæmorrhoids and are subjected later to the usual procedure. In over three years of experience with this regime I would now never carry out hæmorrhoidectomy without first giving the patient the benefit of a trial with this new method. All of the patients who have had it have been at least improved and the vast majority have been rendered symptom free and have avoided operation. This has led to a great saving in operating time, in bed occupancy and in time off work. We have yet to learn whether this remedy is permanent.

Table 1
Incidence of hæmorrhoidectomy
High Wycombe Hospital Group 1961–7

	Total No. of new patients seen in surgical clinics	*Total No. of hæmorrhoidectomies carried out*
1961–4 (average per year)	2,850	54
1965	3,364	52
1966	3,411	38
1967	3,955	9

Acknowledgments: I am grateful to Mr W D Lovelock-Jones and Mr K H Taylor, my colleagues at High Wycombe, who have adopted this treatment and whose results are included in Table 1.

The following papers were also read:

Emergency Resection in Perforated Diverticulitis
Mr Robert Roxburgh
(*The Middlesex Hospital, London*)

REFERENCE
Roxburgh R A, Dawson J L & Yeo R
(1968) *Brit. med. J.* 3, 465

Absorption and Secretion of Water and Electrolytes by the Intact Colon of Conscious Patients
Mr Robert Shields and Mr J Harris
(*Welsh National School of Medicine, Cardiff*)