A Post-Graduate Lecture

ON

THE OPERATIVE TREATMENT OF HAEMORRHOIDS.

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BY

H. GRAEME ANDERSON, M.B., CH.B., F.R.C.S.,

SENIOR ASSISTANT SURGEON TO THE HOSPITAL AND TO THE BELGRAVE HOSPITAL.

TIME will not permit me to enter into a description of all the operative measures invented for the removal of haemorrhoids, but I intend to discuss the three operations in common use at this hospital—the ligature operation, the clamp and cautery, and the operation of excision of the pile-bearing area of mucous membrane, familiarly known as the Whitehead method. All these methods have their uses and give excellent results, but success in this department of rectal surgery depends on the ability of the surgeon to select the most suitable method for the individual case of haemorrhoids which he is about to treat. Happily the old dictum of “one surgeon, one method,” is quickly disappearing. Cases of haemorrhoids may vary so much from one another that it is better not to decide on any particular method of operation until the sphincters have been stretched and then to choose the method most suitable for the pathological condition presented.

This brings us to the question, How do cases of piles vary one from the other? What pathological varieties are met with? And how do they affect the selection of a particular method of operation?

There is the question of size. They may vary from the small internal variety with, perhaps, quite alarming symptoms of haemorrhage up to the large prolapsing kind that may be extremely difficult for the patient to reduce. There is the important question of number: one large pile only may be present, usually an anterior one, or there may be two lateral piles, more commonly there are three—one antero-lateral and two postero-lateral. Sometimes smaller piles are interposed between these three, bringing the number up to four, five, or six. Lastly, there may be a regular ring or rosette of piles, as in this specimen which I show you. Vascularity is another important condition which must be taken into consideration. Some haemorrhoids may be extremely vascular, bleed very easily, and rapidly cause the patient to become anaemic; others, again, which have been subject to slow, irritative, inflammatory changes, become fibrous, avascular, and sometimes adherent. Extensive thrombosis occurs in some cases, the whole of the haemorrhoidal area being filled with little black thrombi. Internal piles may be accompanied by external piles which are varices covered by skin. These latter may be single, multiple, small or large, thrombotic, ulcerated, inflamed or oedematous.

The internal piles themselves may be inflamed, ulcerated, or prolapsed and strangulated. Another point that must be noted is the condition of the sphincter. On the one hand, this muscular collar may be very powerful and difficult to stretch, or it may be very weak and inactive, having been stretched daily from above, perhaps for many years, by the prolapsing piles themselves.

Other ano-rectal conditions may be present complicating haemorrhoids, such as a dorsal fissure, a fistula, a simple polypus or benign tumour, a non malignant stricture, or even carcinoma.

Apart from these local conditions we may find grave visceral disease, cardiac or liver. Severe anaemia may be present. Pregnancy may be present. Again, the individual must be considered. The patient may be a busy business man or a sailor who must rejoin his ship soon, and then we must adopt the method which is likely to allow either the quickest return to duty. Great fear of pain in some cases will cause us to adopt the least painful method. Should the patient be one who may not be easily seen after the operation, a method must be employed which will leave no chance of subsequent stenosis.

When should operative treatment be advised in cases of haemorrhoids? If prolapse and haemorrhage still con-

tinue after regulation of the bowels then operation should be advised. Grave visceral lesions—for example, cardiac or liver disease—contraindicate operation; so also does carcinoma of the sigmoid or rectum.

Should operation be advised during pregnancy? Not as a rule, because the haemorrhoidal condition is due to the pressure of the gravid uterus, and when this is relieved after delivery the haemorrhage and prolapse, as a rule, subside. In some cases the haemorrhage may be so severe a drain on the mother that an operation must be done, but the risk of producing premature labour must always be remembered.

When a case of irreducible oedematous and strangulated haemorrhoids presents itself what are you to advise? The condition is an extremely painful one, and is best treated by immediate operation.

Preparation for Operation.

The treatment before operation is very important. The teeth must be put in good condition and any pyorrhoea alveolaris checked. Vaginal discharge must be treated and all other septic foci put right. Two nights before the operation an ounce of castor oil is given, which produces a good action of the bowels next day. The evening before the operation an enema is given, followed by others next morning till the return is clear. No enema should be given within four hours of the operation. Catechu and opium mixture is given the evening before the operation to check the action of the bowel and prevent material coming from above.

It is best to operate in the lithotomy position, and, after the sphincters are stretched, the skin and rectum are cleansed with soap and water, followed by biniodide solution, and, lastly, iodine.

Operations.

1. The ligature method was invented by Salmon, the founder of this hospital, whose portrait hangs in this room. This is the most generally used and most applicable of all the methods in the treatment of piles. Each pile is held by pressure forceps and drawn downwards, and at the external circumference of the pile base a cut is made with strong, straight scissors. The cut is made parallel to the long axis of the bowel, and deepened until a fairly thin pedicle with the entering vessels is left. This pedicle is tied securely with a No. 8 plaited silk ligature, and then half of the separated pile cut away below the ligature. The other piles are treated similarly, all external tags removed, and when the haemorrhage has been arrested, a small $\frac{1}{2}$ in. rubber tube 4 in. long is inserted and dressings applied. The tube allows flatus to escape, reveals recurrent haemorrhage, exerts pressure on the oozing surfaces, and can be used later for injecting olive oil into the bowel. Various modifications of this operation may be used, such as the removal of the internal and external haemorrhoid in the one cut, or the pedicle may be sutured to the skin margin; the pile itself may be simply transixed and ligatured in two halves without any cutting, or it may be clamped, and the base sewn over, and then the pile removed.

2. The clamp and cautery operation had a powerful advocate in Henry Smith in this country and is performed as follows: Each pile is caught by pressure forceps and a clamp applied to its base in the long axis of the bowel. The clamps we use here are those devised by Gowland which have the special advantages that they are small, easily manipulated, three can be applied at the one time, and the greatest pressure is exerted at the top where the vessels enter the pile. After the pile is clamped it is cut off with scissors and the stump is seared by means of the cautery. The clamps are left on for at least five minutes after cauterization, and this I consider a very important point in the technique. They are then opened slowly and removed very gently so as not to disturb the eschars. Vaseline is inserted and then a pile tube as before.

3. In the Whitehead method the sphincters are very gently stretched and an incision made all round the mucocutaneous junction. The dissection is carried up by means of scissors and dissecting forceps until a cuff is formed of the pile-bearing area of mucosa. The lower part of the sphincter collar is exposed in this dissection. The loosened cuff is now removed and the cut edge of mucous

membrane brought down and stretched to the skin margin. No tube is required in this operation, but simple dressings are applied.

The after-treatment is most important, and is much the same in the three methods described. Light foods are given till the fourth day, when 4 oz. of sterilized olive oil are injected slowly through the rectal tube. The tube is then removed, and an aperient given by the mouth—namely, 1 oz. of castor oil.

The olive oil prevents pain during the first defaecation, after which a boracic wash-out is given and the wound dressed. After the end of the first week the patient is allowed up to sit in a hot bath for ten minutes daily till the end of the third week. Digital examination is carried out three times a week after the first week to guard against any tendency to contraction. Pain the night after the operation is relieved by morphine given hypodermically, and the catheter is used next day should retention of urine occur.

The healing of the wounds varies slightly in the different methods. In the ligature method during the first week three triangular wounds with the bases downwards are felt with the ligature knots above, and more or less slough of the ligated piles lying in the anal canal. The ligatures separate from the seventh to the twelfth day, and the wounds gradually close in. During the third and fourth weeks the wounds feel smoother and more linear, and then there may be noticed a little tendency to stenosis, especially if in the operation the piles were all ligated at the one level and broad pedicles made. After this operation troublesome tags may form, but at the end of six weeks these have usually subsided or been removed, and the anal canal at this period should feel fairly smooth, the wounds having perfectly healed.

During the first week after the clamp and cautery method three soft linear ridges are felt in the ano-rectum. The edges usually separate a little, but gradually close in, and four to six weeks after the operation three soft linear scars are felt, and in some cases the anal canal is so smooth that it would be difficult to tell that an operation had been performed. Large external tags may develop after this operation more than after the other methods. Stenosis never occurs after this operation, and if properly done there should be no fear of recurrent haemorrhage.

After the Whitehead method the stitches usually give way about the fourth day, and the cuff of mucosa retracts from the anal margin for a distance varying from $\frac{1}{2}$ in. to 1 in. No case ever heals by first intention. The ring of granulation tissue gradually contracts, and during the third, fourth, and fifth weeks digital examination and dilatation must be carried out to prevent stenosis. This cicatricial ring, if properly stretched when the fibrous tissue is still young, shows no further tendency to contract after the sixth to eighth week. At this time the scar of operation should feel quite smooth, or at most a fine fibrous annular thread is felt at the junction of skin and mucous membrane.

The average duration of treatment in hospital is for the ligature cases twenty-one days, clamp and cautery cases ten days, Whitehead cases twenty-six days.

In a paper I published in the JOURNAL on October 30th, 1909, I gave the after-results of 300 operations for haemorrhoids, and since that time I have collected further results which with slight variations confirm the original paper. They prove that the clamp and cautery is the least painful method, the ligature the most painful, and the Whitehead intermediate.

The catheter is most often required after the ligature, least after the clamp and cautery, and the Whitehead method again takes an intermediate position.

Sphincteric control returns quickest after the clamp and cautery method, usually about the sixth day. In the ligature cases control returns about the tenth, and after the Whitehead it varies from fourteen to twenty days.

Stenosis never occurs after clamp and cautery. In about 30 per cent. of ligature cases there is a slight tendency to contract. After the Whitehead method about 56 per cent. show tendency to contraction. In about 8 per cent. there may be more marked contraction which requires careful after-treatment and digital dilatation.

Tags, which may be a very troublesome complication after operation, develop most frequently after the clamp

and cautery method, least after the Whitehead method, and the ligature here takes the intermediate position.

Recurrent haemorrhage is more likely to occur after the ligature method than after the other two methods.

Sepsis in the form of abscess, fistula, or post-operative ulceration rarely occurs after the clamp and cautery have been used. In this operation no foreign bodies are left in the rectum, no sutures used. Septic troubles may occur equally after the ligature or Whitehead method.

With regard to the choice of method, I repeat that this should not be decided on until the sphincters are stretched and the haemorrhoidal condition viewed. The ligature method is the most generally applicable, and is very easily and quickly performed. It is especially suited for cases of three, four, or five piles, especially of the mixed variety, when the external and internal piles can be removed at the one time. Very little blood is lost during the operation, and the after-pain can be controlled by morphine, whilst tag formation usually subsides later; or, if they are large, they can be removed under local anaesthesia later. This method is the one to employ if any complication, such as fissure or fistula, be present. A patient can usually return to work six to eight weeks after the operation.

The clamp or cautery operation is certainly the least painful; there is never any fear of stenosis afterwards, and if properly performed there should be no danger of recurrent haemorrhage. It is not suitable when external piles are present as well, or when a fissure or fistula complicates the case. It is especially suitable for cases of not more than three piles of the internal variety, and when there is no redundant anal skin or tags present. It is a bloodless method, and suitable for very anaemic cases, and as it is the least painful method, it should be chosen for patients of a very nervous temperament. If time is an important question, this method should be used, as the period of convalescence is considerably shortened. If the surgeon should be unable to see his patient again, he need have no fear of subsequent stenosis after the clamp and cautery method.

The Whitehead method should be reserved for the following cases:

(a) Where there is a general haemorrhoidal condition involving the whole circumference of the ano-rectum, and especially if there is extensive thrombosis or a considerable extent of prolapse.

(b) In cases where, though the piles may not be large, there is a pathological condition present which may be described as a prefissure or prefistula state. In this condition the anal valves are enlarged, and little blind sub-mucous pockets may be found running upwards or downwards from the line of anal valves. These may have their mouths occluded and act like little incubating chambers, and are undoubtedly in many cases the starting point of fistula; whilst, if Ball's theory be accepted, enlarged anal valves lend themselves to the formation of fissure.

Whitehead's method removes this danger zone as well as the haemorrhoids.

This method should not be employed in all cases of haemorrhoids, but is well suited for the condition mentioned above. If the after-treatment is properly carried out, stenosis should not occur.

UNDER the will of the late Mr. George Palmer, senior partner of the firm of Messrs. Huntley and Palmer, the Royal Berkshire Hospital receives a bequest of £5,000; while Reading Dispensary and the Children's Cottage Hospital at Cold Ash, near Newbury, each receive £500.

AMONG the newly elected members of the Italian Chamber of Deputies we note the names of Professor Guido Baccelli (Rome), Professor R. Rampoldi (Pavia), Professor R. Sanarelli (Bibbiena), Professor R. Santoliquido (Acerenza), Professor T. Morisani (Piedmonte d'Alife), and Professor G. B. Queirolo (Pisa).

THE St. Christopher's Working Boys' Club in Fitzroy Square, which has lately been closed for repairs, was reopened on November 20th, and was visited by a large number of persons interested in its work. The club rooms, which have been entirely redecorated and restored, include a library and several comfortable lounges and billiard rooms. The club forms a much-needed refuge for working boys of all ages whose only amusements would otherwise be found in the streets.