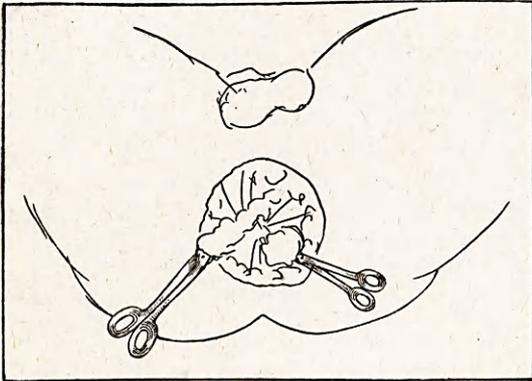


A SIMPLE OPERATION FOR PILES.

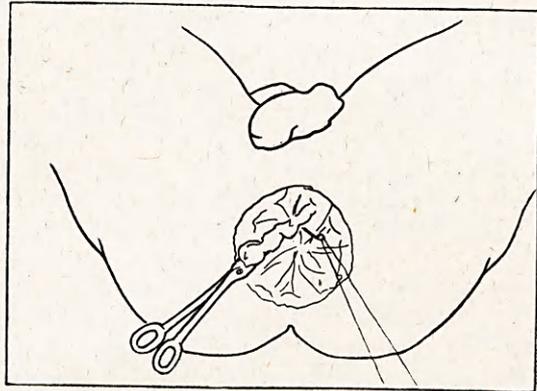
By LIEUT.-COLONEL T. H. FOULKES, F.R.C.S., I.M.S.

I.



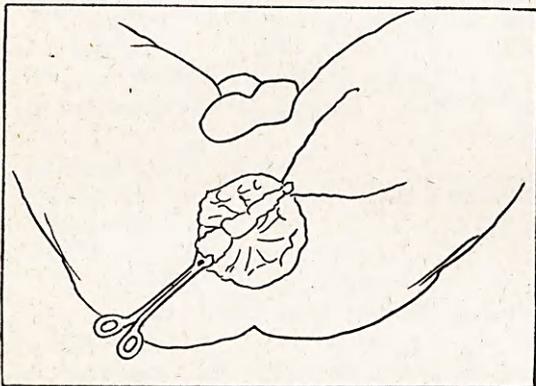
Two piles shown, the one on the left has been taken up with the Kocher forceps and is ready for the needle to be passed through the base of the "ridge."

II.



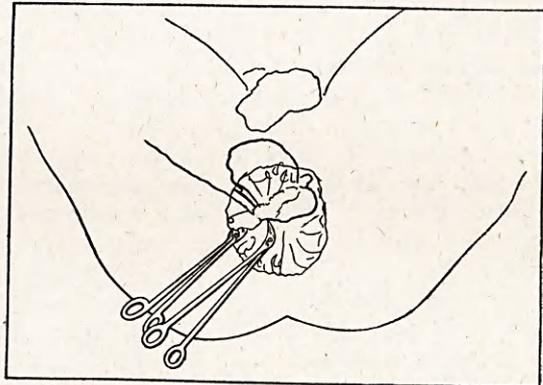
Needle being passed through the base of the "ridge."

III.



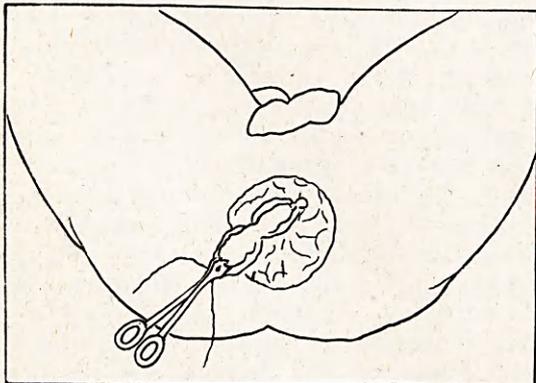
Thread pulled through to its centre and the ridge tied.

IV.



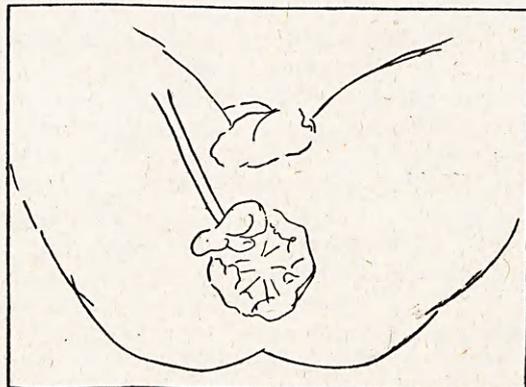
Right hand thread has been pushed through and disengaged and the left hand thread has been seized and is about to be withdrawn by the ligature forceps through the same hole.

V.



Threads about to be tied at the lower end of the pile underneath the forceps.

VI.



recovered in culture from the heart-blood and lung.

Rabbits.—Rabbits inoculated intraperitoneally with freshly isolated cultures died in twenty-two to forty-eight hours (1). Half a cubic centimetre of a broth culture twenty-four hours old killed a full-grown male rabbit in twenty-two hours when injected intraperitoneally.

Post mortem.—The subcutaneous tissues were slightly congested; there was marked congestion of the lungs; punctiform hæmorrhages in the intestine and stomach; a large quantity of clear straw-coloured pericardial fluid; and a large amount of slimy, blood-stained peritoneal fluid. Slides made from the heart-blood, lungs and pericardial fluid were loaded with the organism. It was also recovered by culture from the heart-blood.

(2) Intravenous injection of a large male rabbit with 0.2 cc. of a culture isolated from a rabbit that had died two days previously killed it in fifty-six hours.

Post mortem.—The subcutaneous tissues were congested; the axillary and inguinal lymphatic glands were enlarged, congested and surrounded by a bloody, gelatinous exudate; the lungs were slightly congested; there were a few hæmorrhages on the heart; the pericardium was full of straw-coloured fluid, the spleen, was congested; the other organs appeared normal. Slides from the heart-blood, spleen and lung were teeming with the organism which was also isolated from the lung.

Rats.—Both the house rat (*Epimys rufescens*) and the sewer rat (*E. norvegicus*) were very susceptible to infection with the organism. As a rule death generally took place in from two to four days after subcutaneous injection of the former; and after three to five days in the case of the latter. The organism was identified by microscopical and cultural methods in the tissues of the infected animals in every instance.

Toxin.—Filtrates of broth cultures were tested on guinea-pigs and rats, but appeared to possess no toxic properties in ordinary doses even when given intraperitoneally. Large doses (three to five cc. in the case of guinea-pigs) killed the animals in forty-eight hours.

Classification.—The presence of a capsule, the biochemical reactions, and the cultural appearances of the organism make it resemble most closely Pfeiffer's *B. capsulatus*, which some writers consider identical with Friedlander's *B. pneumoniae*. That it belongs to the same group as these two organisms there can be no doubt whatever.

CONCLUSION.

1. The constant presence of this organism in the tissues of several cases of "influenza."
2. The absence of any other pathogenic organisms in the same material.

3. The absence of the organism from material taken from the same patients a month after their recovery, would appear to establish the present organism as the cause of fifteen cases of a disease resembling influenza clinically.

A Mirror of Hospital Practice.

A SIMPLE OPERATION FOR PILES,

By T. H. FOULKES, F.R.C.S., M.R.C.P. (Lond.)

LIEUT.-COLONEL, I.M.S.

MANY methods have been devised for dealing radically with piles, the most favoured in British schools being the operation by ligature and that by the clamp and cautery. Most hospital staffs teach and practise one or other of these two, seldom are both done at any one hospital.

A surgeon who has been educated at a school which teaches the ligature operation, usually practises the same all his working life, and so also with the man who has been taught the clamp and cautery method. Evidently each is satisfied with the results he obtains from the method he uses, and there is therefore nothing remarkable in his constancy to that method. What, however, is remarkable is the hostility shown to the alternative operation. I have often listened with wonder to the spirited discussions I have heard on this subject; and further, it is noticeable how the advocates of these two methods will join forces to attack the free-lance who practises Whitehead's operation.

Bearing this in mind, it is with all due humility that I offer the following description of an operation which I believe to be better than any of those mentioned. Better from the point of view of the surgeon in that it is extremely easy to perform, it is complete and gives entire security. Better also for the patient because he can get about early, and he suffers little or no pain.

During my stay in Aden I have had the opportunity of doing rather a large number of operations for piles, the enervating, hothouse climate being apparently conducive to the development of this condition. The operation about to be described has been performed on my last 58 cases. Sixteen have been done on sepoys, the rest on Jews and Arabs in the civil hospital.

The operation is really that called "Robert Jones's" in Burghard's *Operative Surgery*, varied by the use of a modification of the interlocking ligature I have already described in the *Indian Medical Gazette* in 1912. I wish to make it clear that I am not claiming to describe a "new operation." In this connection I am tempted to recall a remark made by the late Mr. C. B. Lockwood during a clinical lecture on a certain operation: "As regards the incision, Tweedledum

makes it vertical and Tweedledee oblique and each calls the operation after himself."

The patient is prepared in the usual way before operation. He is anaesthetised and I prefer to operate with the patient in the lithotomy position. The perineum is washed and the anus well swabbed with an antiseptic lotion.

The sphincter is stretched. This need not be done to the extent required for other methods; it is sufficient to stretch until the piles can be easily seen. The anus and rectum are swabbed with an antiseptic and a good sized plug of lint is pushed up the rectum; this prevents the oozing of faeces which sometimes results as the aftermath of the enema.

Each pile is then seized with Spencer Wells forceps and all are drawn down so that the mucous membrane can be inspected to ensure that no piles are overlooked. Selecting one pile, the surgeon holds it up by the Spencer Wells forceps and applies a pair of Kocher forceps to its base in such a way that the whole length of the pile is grasped by the blades of the Kocher forceps which are then clipped. The Spencer Wells forceps are now removed. The surgeon takes the Kocher forceps in his left hand and depresses the handle on the buttock (bearing in mind that a pile *can* be pulled off). In cases with a lax mucous membrane, this will bring the tip of the forceps right out of the rectum, but, in any case, the effect is to raise a ridge of mucous membrane up the rectum from the tip of the forceps. A curved needle armed with not less than a foot of thread is then taken in the right hand and passed deeply through the base of this ridge and pulled half-way through. The surgeon now leaves go of the Kocher forceps, removes the needle and ties the thread as tightly as he can at its middle. This knot is above the tip of the forceps, *i.e.*, higher up the rectum, and the two halves of the thread now lie one on each side of the pile.

The surgeon again takes the Kocher forceps in his left hand and, with a pair of ligature forceps, he seizes the half thread which lies to his right, while an assistant holds the other half thread up out of the way. The thread should be caught by the ligature forceps at or nearly at its end. It is now pushed through the base of the pile under the Kocher forceps, close enough to touch them and about half-way up the blades. The thread is released and pulled through (the ligature forceps remaining *in situ*), the thread which the assistant holds is put into the grip of the forceps and withdrawn through the same hole. The slack of both threads is pulled in and they are tightly tied together at the lower end of the pile while the assistant slips off the forceps.

There is thus a knot above the pile, another knot below the pile and a crossing of the ligature in the middle, and when the lower knot is tied, it is approximated to the upper one, so that the pile is now drawn into a sphere with a very small pedicle. At first I used to make two crossings, but one is enough for the biggest pile. The pile may now be cut off, slit across or left intact. I usually leave them alone.

Each pile is treated in the same way and if two piles are closed together, fusing, or nearly so, they are tied as one. The ends of the threads are left long until the operation has been completed as they serve to hold down the mucous membrane.

There is very little bleeding, there may be a little from the hole the ligature forceps makes but this stops directly the lower knot is tied.

The plug is removed, the ends of the threads are cut short and a morphia suppository is inserted. No dressing or pad is applied.

A few points in the above description may be enlarged upon.

Any ligature material suits, it need not be very thick but it should not be so thin as to cut the mucous membrane. If catgut is used it must be a long piece, so that a sufficiently tight knot may be tied.

Care is necessary in slipping on the Kocher forceps (by the way any long-bladed forceps will do equally well). The forceps must be applied strictly in the line of the pile, because the ridge of mucous membrane which is raised contains the artery running down to the pile and also the continuation of the vein above and these are included in the first knot. It does not much matter how far the Kocher forceps grip up the rectum, but it is important that they should not grip too low down or the skin will be pinched which will cause pain afterwards. The ligature below is tied as the forceps are slipped off and it should be noticed that any skin which may have been caught by the forceps is allowed to slip away before the first hitch is tightened. Only mucous membrane should be included. It does not matter which pile is tied first as there is so little bleeding even in a congested rectum. It is convenient to stand rather to the right of the patient when tying those on the right side and rather to the left for the left side piles.

On the third evening after operation a dose of castor oil is given and two ounces of olive oil are slowly injected into the rectum and allowed to remain all night. After this a laxative is given daily to keep the motions soft until the ligatures have all come away. The patient is given zinc ointment to insert into the rectum well beyond the anus before and after

each motion. If these precautions are not taken there may be some bleeding from the ligature being dragged on prematurely.

The ligatures come away between the fifth and tenth days as a rule, the time depending no doubt on the tightness of the knots and the amount of tissue included in them. Sometimes all have come away by the seventh day.

No orders are given as regards the patients remaining in bed, they are allowed to get up when they like. Arab patients are usually up and walking about on the day after operation. Any restriction with this class of people would certainly be disregarded.

Patients complain of "slight pain" if asked. I have not had the opportunity of performing this operation on a European, so I am not sure just how much pain there is, but the Aden Jews are not a class who make light of their troubles and they have never complained of much pain. It has never caused a sleepless night.

The catheter is usually required once on the first night. There is no tendency to stricture after this operation. The mucous membrane taken up by the ligatures is already a ridge and only the base of this ridge is tied, so the rectum is not materially narrowed.

The semi-diagrammatic drawings will probably clear up anything which may be obscure in the text. They were made by Lt.-Col. C. T. Hudson, C.M.G., I.M.S., to whom I express my thanks.

RESULTS OF MICROSCOPIC EXAMINATION OF THE STOOLS OF FIVE HUNDRED EAST AFRICAN NATIVES NOT SUFFERING FROM INTES- TINAL DISEASES.

BY T. A. HUGHES, M.B.,
CAPTAIN, I.M.S.

THE examinations here recorded were made in the field during the East African campaign. They were undertaken to determine the percentage of carriers of *Entamoeba histolytica* among a particular set of native porters. It had been noticed that amœbic dysentery in East Africa was much less common than bacillary among troops of all nationalities and porters, but that its incidence varied in different localities. The natives examined came mostly from the Tabora and Itigi districts, and largely belonged to the Wanyamwezi tribe. During the period of examination the admissions to hospital for dysentery included both troops and porters, the former contributing relatively and absolutely the greater number. The admissions varied from time to time and it seemed that flies played the chief part in the spread of the disease.

Amœbic cysts were differentiated by their size, the number of nuclei, and the presence or absence

of chromidia. In the case of cysts the size of which would correspond to large *E. histolytica* or small *E. coli* cysts (about 14μ to 18μ in diameter) and in which chromidia were not apparent, the number of nuclei was taken as the distinctive feature. In active dysentery cases the finding of at least one entamœba containing ingested red blood cells was considered necessary for a diagnosis of *histolytica* infection.

The natives examined for cysts had been admitted to hospital for malaria, pneumonia, jiggers, wounds, etc. Two preparations were made from each stool emulsified in "double Gram" iodine solution in normal saline. Flagellate protozoa were common but their incidence was not noted. The commonest were trichomonas. *Lambli*a was also fairly common, especially in the encysted stage. Blastocystis was frequently seen. The numbers of amœbic cysts found were as follows:—

	No. of times found.	Percentage.
<i>E. histolytica</i> ...	56 ...	11.2
<i>E. coli</i> ...	74 ...	14.8

At the time the examinations were made I had not seen Weryon and O'Connor's full description of *E. nana*; since then I have come across amœbæ on two occasions in Dar-es-Salaam, which corresponded to the description of this parasite. It is therefore probable that some cases of infection with *E. nana* are included in the above figures. Uninucleate bodies resembling "J. cysts" were found in 10 cases or 2 per cent.

Out of 210 cases admitted to hospital for dysentery during the period of the investigation, 76 were infected with *E. histolytica*. Plating of the stools was impossible under the circumstances, but the other cases were clinically bacillary dysentery. The cell content of the stools was also characteristic of this disease. The cases nearly all came from troops and followers operating on the Mahenge plain. A higher percentage of amœbic dysentery was seen here than had previously been observed at Morogoro, or subsequently at Dodoma or Dar-es-Salaam. I have no figures for these places, but amœbic cases were in none of them as much as 20 per cent. of the total dysenteries. The patients examined at Morogoro were all Indians and at Dodoma and Dar-es-Salaam mostly whites. On the whole it would appear that although a relatively large number of the natives of "G. E. A." in some districts at least are carriers of *E. histolytica* and therefore potential sources of amœbic infection, bacillary dysentery, at all events among troops, was the more common disease.

Helminth infections were observed in the following proportions among the 500 porters examined;