condition of her tongue also supported this impression. The abdomen felt very resistant but not rigid. At operation there was a large quantity of blood-stained fluid. The last two feet of the ileum were a brilliant scarlet colour, and showed numerous small black areas of haemorrhage. The gut wall was markedly thickened, owing to the blood in the tissues, and this explained the mass felt per rectum. The haemorrhage stopped abruptly at the ileo-caecal valve, leaving the caecum almost normal. The appendix, apparently normal, was removed, and was found to contain masses of thread-worms. The rest of the ileum was mottled, the mottling gradually decreasing towards the jejunum. The other abdominal viscera failed to reveal any further relevant pathology. Recovery was complete and convalescence normal, except for the following incidents. For three to four days after operation the motions were mixed with dark blood, and on the third day the urine was similarly discoloured. The post-anaesthetic vomitus contained blood. On about the tenth day she had a severe attack of epistaxis, and about the same time a marked purpuric rash appeared, involving both feet and the outer sides of the ankles. This was so severe that the feet were almost blue. There was also considerable swelling of the ankles.

Blood examination after operation was as follows. Blood film: marked preponderance of mononuclear cells. Differential count: mononuclears 35 per cent., large lymphocytes 22 per cent., small lymphocytes 8 per cent., polymorphonuclear leucocytes 35 per cent.; coagulation time 5 minutes; blood platelets, 114,000 per c.mm.; red blood cells, 5,500,000; white blood cells, 16,500.

It is interesting to note that, although the case was a definite example of purpura, the internal signs appeared long before the surface rash, and although the girl was operated upon when the disease was at its height haemorrhage at this time was not greater than usual. The scar showed some keloid formation. There are many examples such as this in the literature, but usually some petechial spots are present to help. If *Pulex irritans* can be excluded—difficult in the hospital patient—such a rash should raise suspicions.

CASE III

The patient was an unmarried girl, aged 23. While out for a walk in a wood she had tripped and fallen prostrate. She excoriated the left breast and was "winded," but was able to continue home. The journey took some forty-five minutes, and involved climbing a wall. It was in the late afternoon when she arrived, and as she did not want food she went straight to bed and slept the night through. In the morning she awoke with generalized abdominal pain, most marked in the right iliac fossa. Breakfast and midday dinner were refused, and when her doctor was called in in the afternoon he

FIG. 2.—Actual photograph of ruptured spleen. Coin shows how greatly the spleen has become engorged with blood.

found her in bed with a temperature of 100.5° F., a pulse of 120, and a tender resistant abdomen. Rectal examination showed a tumour and tenderness high up in the right side. On arrival at hospital the diagnosis of appendicitis was confirmed with the possibility of a perforated peptic ulcer. At operation she was found to have a ruptured spleen, which was almost severed in two (see Fig 2). She was very ill for a few days, but ultimately made a complete recovery. The interesting points are the mild accident, the amount of exercise she was able to perform afterwards, and the latent period—now so well recognized—before a ruptured spleen was diagnosed. Section of the spleen showed a normal splenic pulp well saturated in blood.

CASE IV

The patient was a man, aged 55, who had had intermittent ill-health for some years, and who, as a result of a blood pressure of over 200 mm., had retired from active work. For vague urinary discomfort he had been cystoscoped three months previously; the result of the examination was entirely negative for any urinary disorder. When seen by me he was acutely ill—tender and rigid over McBurney's point,

tender per rectum, with a pulse of 110 and a temperature of 101° F. He had vomited twice, and had been ill one and a half days when I saw him. The onset had been characterized by mild abdominal colic, umbilical in distribution. This had gradually increased in severity, and had appeared to fall down to the right side. Physical examination revealed nothing else abnormal. His urine was clear. He was

operated upon after the firm diagnosis of acute appendicitis. At operation I found the appendix normal, as also was the terminal ileum and caecum. Medial to the ascending colon, however, and overlying the kidney there was a hard mass. At first it appeared to be a calculus in the pelvis of the kidney, but it soon separated with the colon. I then discovered that it was a faecalith in a gangrenous diverticulum projecting like a finger from the medial wall of the ascending colon (Fig. 3). It was enclosed in a mass of the omentum, which in pursuit of its constabulary duties had come over to surround it. I removed the sac and infolded the friable tissues as well as possible. After a delay of four weeks due to a temporary faecal fistula the patient was able to leave the nursing home. A bismuth enema taken since showed nothing abnormal. The case is interesting in that the site of the diverticulum was unusual. This also explains the previous urinary history.

FIG. 3.—Note diverticulum of ascending colon overlying kidney.

The above cases, although in no way unique, represent some of the rarer conditions which one may mistake for an acute appendicitis. Such cases have a humbling but stimulating effect, and make one feel that it is very true about the appendix that if one "wants never to be wrong one must never make it a diagnosis."

I am indebted to Dr. R. W. M. Strain for Figs. 1 and 3.

POSTERIOR POSITION OF THE OCCIPUT IN LABOUR

BY

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The posterior position of the occiput occurs frequently in labour. It is not necessarily a serious complication, nor is it one difficult to deal with. It is, however, often followed by grave consequences to mother and child; of these the most common are maternal trauma from ill-advised or unskilled attempts at delivery, a septic puerperium from frequent examinations and manipulations, and injury or even death of the foetus from trauma or asphyxia. Authors differ as to the frequency of occipito-posterior positions, their estimates ranging from 10 to 40 per cent. of all births. This discrepancy in figures results from failure to make a diagnosis early in labour, and from counting only those in which birth takes place with the occiput behind. A large number rotate forward spontaneously, and unless closely observant the attendant fails to note the original position.

DIAGNOSIS

Recognition of occipito-posterior positions is not difficult if use is made of the diagnostic means available—palpation, auscultation, and examination per vaginam. On palpation the limbs are felt lying in front; and if the

hand is passed downward a deep depression can be felt above the pubis—this is the space between the chin and chest, and differs markedly from the much shallower depression found in anterior positions. On auscultation the heart sounds may be obscured by the limbs, or they may be heard with unusual distinctness when the limbs are not in the way and the foetal chest is closely applied against a thin abdominal wall. The distance from the median line of the mother's abdomen at which the heart sounds are heard is also helpful. When they are heard far out towards the mother's flanks it is strongly suggestive of an occipito-posterior position. On examination per vaginam one often notes how high the head is and the ease with which the anterior fontanelle can be felt. In anterior positions the posterior fontanelle is first felt, but in posterior positions it is felt with difficulty or not at all. Another significant sign is an unusual roominess in the hollow of the sacrum, which is due to the fact that the back part of the head does not fit into it as well as the forehead.

In neglected cases, sometimes, a large caput has obscured both sutures and fontanelles, making diagnosis difficult. One unfailing landmark then remains—the ear. The fingers are passed up until the ear is reached, and whichever way the helix points determines the position of the occiput.

ANATOMY

In order to understand why occipito-posterior positions give difficulty in labour certain anatomical factors must be taken into account. By comparing the shape of the foetal head with the pelvic inlet it is noticed that in anterior positions the larger back of the foetal head adapts itself more readily to the roomy anterior half of the pelvic inlet, while the maximum transverse diameter of the head also nearly coincides with the longest oblique diameter of the inlet. In posterior positions the reverse obtains, and the large back of the foetal head attempts to enter the smaller posterior half of the pelvic inlet which, in addition, is encroached upon by the promontory of the sacrum. In posterior positions the convex foetal back is directed against the convex maternal lumbar spine. This necessarily brings about extension of the foetal spine, resulting, in turn, in extension of the foetal head. The head, now, in order to engage in the inlet, must do so in the occipito-frontal diameter of four and a half inches instead of in the suboccipito-bregmatic of three and three-quarter inches. Engagement and descent are delayed unless the head is small or the pelvis roomy. Strong contractions will, however, cause the head to engage and will force it downward, but, since the sinciput is on the same level or lower than the occiput, it reaches the pelvic floor first and, according to a well-known law, rotates forward, while the occiput rotates into the hollow of the sacrum. Thus is produced the persistent occipito-posterior position. The forehead is now fixed behind the symphysis and becomes the centre of rotation. With strong pains the head will in time be born, but since the occiput has to pass over the perineum an extensive rupture often results. All too often the uterus has by this time become exhausted, and in the case of a primipara or of a patient with a scarred perineum it is unequal to the effort, progress ceases, and help is required. The underlying cause of difficulty in occipito-posterior positions is lack of flexion, and it may be stated almost as an axiom that with good flexion labour will proceed favourably, other complications being absent.

TREATMENT

In most textbooks the treatment recommended consists in rotating the occiput forward by the hand in the vagina, while the external hand pushes the anterior shoulder in

the direction of the mid-line of the abdomen. By a series of pushes the shoulder is gradually pressed in the right direction till the back lies anteriorly and the malposition is corrected. This is not an easy manœuvre, and, unless the abdominal wall is unusually lax or the patient anaesthetized, it all too often fails. A method taught by Hodge many years ago was to correct the position by increasing flexion. Two fingers are passed into the vagina and touch a point midway between the anterior fontanelle and the brow. During a pain pressure is made upward; the occiput descends and turns forward. It is a simple manœuvre, and very often succeeds; but if after three or four pains the occiput does not turn, it should not be persisted in any longer. Of late, turning the occiput forward by means of the obstetrical forceps has been advocated by various authors. A brief glance at the forceps and then at the bony pelvis should convince one that they are ill adapted for this purpose. It is a difficult and dangerous operation, and though successfully carried out by expert hands, it should never be attempted by the general practitioner.

Author's Method

A method of dealing with occipito-posterior positions which I have used for many years consists in turning the back forward by internal manipulation alone. It is carried out as follows. The patient is placed on her back, the legs being held in place by stirrups; she is completely anaesthetized and all aseptic precautions are taken. The os must be fully or nearly fully dilated and the membranes ruptured. The gloved, well-lubricated hand is passed into the vagina—the right hand if the occiput is to the left and the left hand if it is to the right. The hand is carried above the head and grasps the shoulder with the four fingers placed over the child's scapula and thumb over its clavicle (see fig.). The shoulder is rotated forward toward the mid-line until the back lies in front.

Position of hand preparatory to turning the back anteriorly in a case of left occiput posterior.

The occiput usually turns with it, but if it does not it can be rotated forward as the hand is being drawn from the vagina. What often surprises one is the comparative ease with which this can be carried out. The head is now pressed into the inlet in its new position, a tight binder is applied, and the patient is left to deliver herself. A better alternative is to apply forceps and end the labour: the patient is fast asleep, and all the conditions necessary for forceps delivery are present. It seems, in these circumstances, that the more logical procedure is to deliver her than to wait. I have invariably done so, and have had no occasion to regret it.

Only in neglected cases in which the membranes have been long ruptured and the uterus is firmly applied to the foetal body is this manœuvre difficult or impossible. Another expedient then remains. Under the conditions already given, the physician should pass the hand into the vagina and turn the occiput forward, disregarding the body. To prevent its slipping back into its old position an assistant holds it in place by suprapubic pressure while the blades are applied. The head is now delivered and the body allowed to take care of itself.

This procedure is not over-difficult, and can be carried out by anyone possessed of even ordinary manual dexterity. It is easier than the podalic version advocated by some authorities. Rotation of the child in this manner on its long axis involves a decidedly smaller risk than performing an internal version or a Caesarean section—as recommended by the radical school.

I would like to acknowledge with thanks the assistance given me by Dr. Donald H. Williams for the drawing and also other help in the preparation of this paper.

NOTES ON THE INJECTION TREATMENT OF INTERNAL HAEMORRHOIDS

BY

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It is unnecessary at this stage to restate the advantages of this method of treatment of a very common and annoying disability. The advocates of operation for every case of piles do not seem to realize that for every patient who comes to the surgeon prepared to undergo an operation there are perhaps thirty suffering a minor degree of discomfort who are content to tinker with ointments prescribed by the nearest chemist and enthusiastically advertised in the lay press. This group of patients will never submit to operation unless their symptoms become aggravated, and it is precisely this group which responds in a gratifying manner to treatment by injection.

After five years' experience of this method I feel that there are certain refinements of technique which simplify handling of the case, and obviate most of the unpleasant sequels which sometimes occur after injection.

Choice and Preparation of the Solution.—I think that most surgeons interested in this branch of proctology will agree that, looked at from all angles, a 5 per cent. phenol-in-oil solution is the most satisfactory one to use. Sloughing and secondary haemorrhage, which admittedly occur, only occasionally seem to be inseparable from the use of a solution which involves direct injection into the pile; since the phenol in oil is injected above the pile-bearing area this complication is avoided. It is most important that the oily solution be prepared correctly. Several writers have observed the onset of influenza-like symptoms following an injection, and have attributed them to various factors, such as the use of sweet-almond oil, mixture of water with the injecting fluid, or the use of large quantities of the solution. Following on a series of baffling cases, and with the aid of Mr. Buxton, dispenser at the New Somerset Hospital, Capetown, I have succeeded in tracing the factor responsible. The symptoms are analogous to those of protein shock, and if the vegetable oil be boiled for an hour and then filtered, the phenol being added subsequently, this complication will not occur. In other words, the process of preparation should be similar to that of the oleum phosphoratum of the B.P. The choice of oil is immaterial. After a trial of peanut oil I have gone back to using sweet-almond oil as the diluent.

Spacing of Injections.—As a general rule, and unless there is special need for hurry, it is wisest to inject at weekly intervals. It is a little difficult to observe the result of an injection if the period between is shorter, and occasionally the fluid will leak through a puncture made only a few days previously. The total number of injections varies, of course, with the case, but it is advisable at the end of treatment to ask the patient to return after a month. At this stage one further injection will often consolidate the cure. In looking over my records and contrasting them with operation cases in order to reach a decision on the vexed question of recurrence, I have been impressed with the necessity of one or two additional injections after the piles are to all intents and appearances

cured. I think there can be no question that in bad cases the percentage of recurrence is higher than it is with operation, but—in my opinion this is an important point—these recurrences are still amenable to treatment by injection, and respond very favourably in the end. It is a significant fact that medical men, when they come as patients themselves, ask to be injected in preference to submitting to operation, despite their knowledge of the perceptibly higher recurrence rate.

After-pain.—The slight discomfort following an injection may become very real pain if too large a bleb is raised subjacent to the mucous membrane. This is to be expected if we consider that an increase of tension will give rise to pain in any part of the body. The temptation to hurry on the cure must be resisted if the treatment is to be truly ambulatory. Occasionally patients are seen for the first time in an attack of acutely inflamed piles. The angry red prolapsed piles and the oedematous anal skin present a very formidable sight. Rest in bed with alternate hot and cold applications, followed by injections when conditions have returned to normal, will give good results. Injections during the acute stage may give rise to endless trouble.

Coexistence of Fissure.—No injection should be attempted in the presence of a fissure. Even where operation is indicated for the fissure it is preferable in many cases not to remove the piles at the same time, but to leave them for injection subsequently.

Badly Prolapsed Haemorrhoids.—It is in this group that the highest percentage of recurrence takes place. The first few injections should be given more deeply than usual, an endeavour being made to glue the mucous membrane to the muscular coats. Usually the injection is made with a view to raising a definite bulge, yet avoiding whitish discoloration of the overlying mucous membrane. In prolapse cases the preliminary injections are made with the needle passed just deeply enough to avoid a bulge. Occasionally in injecting through an area stiffened by previous injections some of the solution will leak through. It is better to wait a day or two and begin lower down, giving the needle an upward inclination.

Skin Tags.—Cases are frequently seen where oedematous skin tags bear witness to previous attacks of inflammation or thrombosis of external piles. Injections cannot, of course, cure these, and if they interfere with cleanliness they must be excised. In the standard operation for piles insufficient removal of redundant skin will leave the patient with an annoying reminder of his previous trouble. We are apt in our dread of post-operative stricture to err on the side of caution, and it is in such cases that it is useful to mark out, previous to operation, with methylene-blue, the area of skin to be removed.

RECONDITIONING OF TONSILS BY THE DIATHERMY CURRENT

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It is frequently noticed that infection of the tonsils—the first of a chain of lymphatic structures intimately associated with the digestive tract throughout its length—will be followed by a spread to the gall-bladder, appendix, colon, and locomotor system. In the past the only treatment has been surgical, of which the best is removal by dissection. From cases which have come under our notice we have definite clinical evidence that, as a rule, partial excision, scarification, and “firing” by the electro-cautery are more conducive to subsequent trouble than if the organ had been left intact. The ideal