handy, and is, I think, free from the objections stated above. The only really new feature in the apparatus is a vulcanite two-way tap, which Messrs. Arnold and Sons have kindly made for me. This tap I attach to an ordinary siphon enema; one nozzle is for insertion into the catheter; with the other, or waste tap (B), a piece of indiarubber tubing is connected to conduct away the effluent from the bladder. The catheter employed should be, where preference is possible, a large indiarubber one, but the nozzle of the tap is tapered so as to fit several sizes.¹ In order to use the apparatus any residual urine is first evacuated by the catheter; the latter then remains full of urine. The enema and tap are previously immersed in the fluid to be injected, which is worked through the enema (the waste tap being turned off) a few times to expel all air, and the tap turned off while below the surface. The whole is then entirely free from air, the nozzle is pushed into the catheter, the stopcock of A turned on, and the ball of the enema slowly and gently squeezed empty of its contents; by this means from one ounce and a half to two ounces have been injected; the afferent tap is then turned off, the waste opened, and the process repeated as often as necessary. The tap is made of vulcanite, which is superior to brass, as it is much lighter, and so does not tend to drag the catheter out by its weight. I have employed this method of irrigation in a great many cases in

both sexes, and am fully satisfied with its convenience and efficacy. Water at the temperature of the body, to which a few drops of Condyl's fluid have been added, I have found the most efficient and least irritating of all injections that have been recommended, superior even to carbolic acid and to quinine, the use of which is apt to be followed by some vesical tenesmus and discomfort.

As regards the quantity to be injected, distension of the bladder is of course unnecessary and harmful; the habitually slow distillation of urine should be remembered; at the same time it would appear that the condition of an empty bladder is one not of tonic contraction, but of passive collapse, I think, bearing these facts in mind, that the gradual and cautious injection of about two ounces of fluid at a time is a safe and practicable mean.

The relief which follows the evacuation of irritating and offensive residual urine, and the cleansing of the unhealthy and chronically inflamed membrane, is often truly marvellous; and I feel sure that the occasional judicious washing of the bladder in cases of chronic catarrh or low inflammation of that organ does much to prevent the extension of inflammation upwards, and so prolong life, while it greatly adds to the comfort of the patient, and for these reasons might be more frequently resorted to than is usual in such cases.

Regent's-park, N.W.

ON THE TREATMENT OF THE PERINEUM IN PREGNANT AND PARTURIENT WOMEN.

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CHILDREN AND WOMEN.

THE importance of the perineal body in helping to maintain the female reproductive organs in a healthy condition, and the numerous ill effects arising from its partial or complete rupture, are, I think, not sufficiently recognised by many medical men, though they are constantly being brought prominently

under the notice of gynaecologists. During the last fifteen months many women have attended the out-patient department of St. Thomas's Hospital suffering from various disorders, due, it appears to me, to the loss, in a greater or less degree, of the support of the perineum. As prevention is better than cure, these few remarks are written in the hope that they may induce my brother practitioners never to ignore a laceration, however slight, of the perineum.

1. *During pregnancy.*—It must necessarily seldom happen that we are called upon to operate on a ruptured perineum, for as a rule the patient seeks advice before she again becomes pregnant. In the following case, however, the discomforts due to the rupture were so aggravated by the gravid state as to compel the woman to apply for help. Mrs. J—, aged twenty-one, attended the hospital on Nov. 4th, 1882, and gave the following history: Has been married four years; has two children; first child was delivered with instruments. The perineum was ruptured, but reunited by wire sutures. In the second confinement (Jan. 29th, 1882) the perineum was again torn, but nothing was done to restore it. Since then the patient has suffered more or less from incontinence of faeces, and this trouble has greatly increased during the last three months, together with a constant sense of bearing down and backache. Catamenia have not appeared for three months. There has been some morning sickness, but patient positively asserts she is not pregnant. On examination, there is found a complete rupture of the perineum, extending through the sphincter ani and for half an inch up the recto-vaginal septum. The uterus is low in the pelvis and somewhat retroverted; bimanually, it is about as large as a small cocoa-nut. Notwithstanding that the patient was pregnant, I advised her to come into the hospital for an operation, to which she consented, and, with Dr. Gervis's kind permission, I took charge of the case. On Nov. 16th, the patient being under the influence of ether, I closed the rent in the septum, reunited the divided sphincter ani and the perineum, taking care to make the bases of the triangular raw surfaces unusually wide, and not extending the apices quite as high as usual. Four deep wire sutures with bars were used, and the superficial edges brought together with catgut. A self-retaining catheter was introduced into the bladder, a half-grain morphia suppository into the rectum, and the knees securely tied together. The operation lasted an hour and a half. The further progress of the case is briefly as follows. There was a good deal of sickness after the anaesthetic. An opium pill was given every night to keep the bowels quiet until the 23rd (seven days after the operation); then a warm oil enema was administered, and when the bowels had acted the deep wire sutures and the catheter were removed. The perineum was found to be firmly and completely united; no cystitis. The patient's stay in the hospital was prolonged by an attack of bronchitis. She was discharged cured on Dec. 14th, feeling perfectly well, and with absolute control over the faeces. She came to see me at intervals, and continued well. At 10 P.M. on June 23rd, 1883, labour pains set in, and the patient was delivered, ten hours and a half later, of a healthy male child. The perineum sustained no damage whatever.

Remarks.—This case is interesting, showing as it does that a pregnant woman may undergo rather prolonged anaesthesia, together with an operation on the generative organs, without interference with the pregnancy. Other severe operations have been performed without ill effect, at various stages of pregnancy, by Sir Spencer Wells, Mr. Cooper Forster, Professor Schroeder, and others; but, as far as I have been able to ascertain, there is no case recorded of perineorraphy in a similar condition which would help us in answering the question, How soon after union is a perineum likely to successfully bear the strain to be put upon it during the ensuing labour? Many women pass through the period of pregnancy with torn perineums without much discomfort, but in the above case the operation was, I think, not only justifiable, but clearly indicated. Obviously there is some risk run of abortion resulting, and this may be brought on either from the rather severe after-sickness which almost invariably occurs after operations on the female generative organs, no matter what anaesthetic be employed, or from the toxic effect of the drug on the foetus.

2. *During parturition.*—Numerous measures have been employed to protect the perineum during parturition, but, from observations of over five hundred cases, I have come to the conclusion that most of them (such as supporting the perineum with the hand, stretching it with the fingers, placing the patient with her legs down instead of bent up

¹ In the cut the nozzles are represented rather too conical; it is important, for the reasons given above, to have the bore as large as possible.

in the usual obstetric position, &c. &c.) are of little value except in so far that they give the patient, her friends, and the medical attendant himself the idea that everything possible is being done to guard it against rupture, and when this happens it is put down as an unavoidable occurrence. And so it is very often. But we can, I think, not infrequently do good by regulating the rate at which the head descends on and distends the perineum, by applying pressure during a pain to the presenting part, with the fingers brought more or less into the shape of a cone. It often happens that the head, having pretty well dilated the perineum with pains of moderate intensity, recedes somewhat, but the next pain, which is one perhaps of great violence, rapidly forces it out, carrying every obstacle before it, and causing a rupture of greater or less extent. Time, certainly, is often an element of great importance, for it is well known that a part rapidly dilated may give way, while the same part slowly dilated may be induced to yield and dilate without tearing. The means I have found most effectual for saving the perineum are the forceps and lateral incisions, either separately or combined. The forceps act in a twofold manner. First, by it we can regulate the rate at which the head distends the perineum; and, second, lateral compression by the blades elongates the head, which thus more readily escapes through the vaginal outlet. In the last thirty-five of my forceps cases (twenty-four of which were primiparæ) the perineum was ruptured in three. Incisions are of great value in saving the perineum. One on either side of the raphe (at some distance from it), about half an inch long and midway between the anal and vaginal orifices; they should be made at the acme of a pain when the perineum is distended, so that the patient may not feel them much, or she may be given a few whiffs of chloroform. The incisions gape a good deal and relieve the tension immensely; they reunite readily. But if, notwithstanding all our efforts, the perineum ruptures, as it assuredly will sometimes, what then are we to do? Shall we leave the laceration alone and trust to chance for its healing, or shall we coaptate the edges by sutures? Now, it appears to me that there should be no hesitation whatever on this point. It is true, union *may* occur (especially if the rupture be slight), but oftener still it does not, rendering the woman more liable to septic infection from the raw surfaces, and, later on, to many uterine and other troubles.

From seeing, some few years back, a good deal of midwifery practice in the country, I know that really good practitioners often either ignore altogether lacerations which, at the very least, extend half-way to the anus, or make so light of them that they consider it unnecessary to do anything beyond, perhaps, ordering the nurse to keep the patient's knees together for a few days; the explanation of this is, doubtless, in some cases that the medical attendant thinks union will occur without sutures, but far more frequently from the fear that if he says there is a tear it may be attributed to neglect on his part; but surely nowadays most patients and nurses know that it is often unavoidable; at all events, they find out whether there is a laceration or not, and also the desirability of having it cured.

From the many cases of prolapsus uteri, retroversion and retroflexion, endometritis and endocervicitis, leucorrhœa, and ovarian disorders, with consequent ill-health, and too often chronic invalidism, that have come under my notice secondary to perineal laceration, I feel somewhat strongly on this point, and consider that any medical man who neglects to suture a ruptured perineum which extends half-way to the anus (and, *a fortiori*, one that extends further still), fails in his duty towards his patient. If one class more than another requires every care being taken to retain a sound perineum, it certainly is that of the lower orders, simply because their laborious occupations very soon induce uterine troubles when the support of the perineum is wanting. Quite recently I operated on a patient who, since her last confinement four years ago, has suffered from backache, leucorrhœa, "bearing-down pains," and inability to undergo exertion. She had been treated at several hospitals without relief. As the perineum was lacerated in half its extent, I considered it the *fons et origo mali*, and performed perineoraphy, with the result that the woman expresses herself as "quite well, and feeling a new being altogether."

It certainly is quite as essential for a medical man to carry to each midwifery case a perineum-needle with some wire or silk as it is to have a bottle of ergot. And how easy the operation is! I have performed it without an anæsthetic, but as a rule it is better to give chloroform, and for this it is not necessary, although of course preferable, to have

another practitioner's help. The after-treatment is important. The vagina should be washed out night and morning with some disinfectant, the urine drawn off night and morning for about five days (or, better still, a self-retaining india-rubber catheter left in for the same length of time). The bowels should be kept quiet for six days unless the patient's general condition calls for an aperient, then *after* an oil enema has thoroughly cleared out the rectum, the deep sutures can be removed.

Lambeth-palace-road, S.E.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUYS' HOSPITAL.

CASES OF MALIGNANT DISEASE OF RECTUM.

(Under the care of Mr. BRYANT.)

CASE 1. *Malignant Stricture of Rectum; Colotomy; Improvement.* (From notes by Mr. Downes.)—David S—, aged thirty-nine, a carpenter, was admitted on May 8th, 1882, when the following history was obtained: Patient is married; his wife has had six children and two miscarriages. He was quite well until two years ago, when constipation began to trouble him. This constipation has continued the most prominent symptom of his illness. Latterly the bowels have not acted from five to eight days at a time, and only then after medicine. The motions are hard, small, and in irregular masses. There is no pain on defecation. Six months ago he first noticed slime with his motions, and this with blood has accompanied them from time to time since. Appetite good, and patient has never been sick.

On May 12th colotomy was performed. The oblique incision was made in the left lumbar region. The colon when seen was drawn to the surface and stitched to the edges of the wound and opened. The arteries were tied with catgut. A drainage-tube was put on the posterior part of the wound, which was washed with hot iodine water and dressed with terebinte and oil. On the 15th nothing had passed from the rectum; fæces escaped from the false opening.—20th: Pain in and some discharge from the rectum, but patient otherwise comfortable.—25th: A slight prolapsus at the opening; rectum washed out with water.

June 9th.—There was a good deal of pain in rectum, but the patient was better and got up for the first time. On July 5th he was discharged with a plug in the wound. The fæces continued to pass through the opening, and were of a soft yellowish consistence.

In November, 1882, the patient was comfortable, the artificial anus acting well; discharge of mucus from the anus occasionally; general condition good.

CASE 2. *Epithelioma of Rectum and Anus; Colotomy; Relief.* (From notes by Mr. Rolston.)—Richard K—, aged sixty-two, a farm labourer, was admitted on January 24th, 1883. History: Seven months ago the patient first noticed constant pricking pain round the margin of the anus, not worse on defecation. These pains gradually grew worse, and a month later he noticed a swelling about the size of a pea protruding from the anus, and observed blood with his motions. The swelling has increased in size and the pain become worse. He has had bearing down pains in the rectum ever since the swelling appeared. His motions are small and consist of blood and slime. He has been unable to sit down or lie upon his back lately. His bowels act twice daily.

State on admission: The patient is a thin, sallow-complexioned man, with his face a little drawn. He has an intensely fetid discharge constantly running from the rectum, composed partly of fæces and partly of slime, &c. On the left side of the anus protrudes a thick roll of growth. It extends up the rectum as a greatly thickened mass as far as can be reached with the finger. The patient suffered great pain during examination. There is a small gland in the left groin enlarged.