one case where a nurse in a smallpox hospital contracted the disease on duty. During the epidemic of 1901, before joining the staff, she had had a severe attack of confluent smallpox by which she was badly marked. A few months after her recovery she joined the staff of the hospital in which she had been a patient, and under the circumstances it was not considered necessary to vaccinate her. As the result, however, of being exposed to a massive dose of virulent infection, she caught a second attack of smallpox, this time of a mild form, shortly after joining.

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LOCAL ANÆSTHESIA IN RECTAL SURGERY.

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M.S.

MANY of the minor rectal conditions can be adequately dealt with under local anæsthesia. By means of the technique described below, full relaxation of the sphincter can be obtained, and any of the following procedures can be carried out with ease and absence of pain:—

- (1) Ligature of internal piles.
- (2) Excision of external piles, whether simple skin tags or thrombotic external piles.
- (3) Removal of simple polypi from the lower rectum.
- (4) Incision of fissures or laying open of short direct fistulæ.
- (5) Excision of tissue for microscopical examination, as, for instance, from a suspected early squamous carcinoma of the anus.
- (6) To permit proctoscopy and sigmoidoscopy when, owing to the presence of a fissure or other painful lesion at the anus, examination would be difficult or impossible on account of pain.

Method.—The solution is a 1 per cent. solution of novocain; it is essential that this should be freshly prepared and sterilized by boiling in a flask over a flame for five minutes. So important is the preparation of the solution that in my hospital work I insist on the solution being dispensed and sterilized on the morning of the operation, and for private work I prepare and sterilize the solution myself an hour or two before it is required. In the average case, 1½ oz. of novocain is required and is poured into a small sterile receiver, six drops of adrenalin solution are then added. The most convenient syringe is a 10 c.c. Record with an eccentric nozzle; two needles are required, a fine hypodermic and a 2 in. No. 20 Record.

With the patient lying on his right side and the knees drawn up, the anus is painted

with tincture of iodine, and a wheal of novocain is raised 1 in. posterior to the anus in the middle-line, by means of the fine needle. The syringe is filled and the 2 in. needle firmly attached; the left fore-finger, lubricated with vaseline, is passed into the rectum and the long needle is inserted at the site of the wheal and gradually thrust in deeply in the middle-line posteriorly; the novocain solution is injected as the needle advances, the entire 10 c.c. being injected here. The syringe is then refilled, and 10 c.c. are injected in turn into the sphincter, first on the left and then on the right side. The left fore-finger keeps the sphincter on stretch, and the needle is passed in deeply until its point reaches approximately to the level of the anterior anal margin. Generally the sphincter can be felt to relax immediately the solution is injected. If much tissue is to be excised from the anal margin, a few additional drops of novocain may be injected anteriorly or at any particular point that seems indicated. If a fissure is to be incised backwards, a further subcutaneous injection of novocain should be made posteriorly. If the operation is being performed in the lithotomy position, the patient can be turned on to his back and put up into position immediately.

I have used this method now for more than a year as a routine for all hæmorrhoid operations, and also for the other conditions as indicated above. The advantages are as follows:—

- (1) Ease and safety.
- (2) Rapidity of anæsthesia.
- (3) Complete relaxation of the sphincter.
- (4) Absence of subsequent vomiting and of liability to pulmonary complications.

Post-operative pain has been particularly investigated, and I am convinced that pain is less than after a general anæsthetic. The patients are able to return quietly to bed, have their tea or smoke a cigarette, and have in general expressed a decided preference for this technique. Most cases receive a single injection of $\frac{1}{2}$ gr. of morphia about

midnight on the day of operation, and many patients have not needed anything but a small dose of aspirin. The absence of external œdema after operation has been very noticeable, and is probably due to the fact that these patients have no vomiting or straining after operation.

CRIME AND INSANITY. LECTURE V.

GIVEN AT THE MAUDSLEY HOSPITAL, MAY 28, 1929.

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(*Continued from p. 158.*)

Patients suffering from manic-depressive insanity are liable to recurrent attacks, and may have an extensive experience of mental hospitals. In an earlier part of this lecture I pointed out that patients who had frequently suffered from attacks of alcoholic insanity were liable to feign insanity when accused of criminal conduct as a result of their experience gained in mental hospitals. The same moral deterioration does not seem to occur with manic-depressive patients, and they do not usually assume insanity in order to escape the consequences of a crime. They do, however, sometimes tell untruths in an endeavour to cover their offence. A manic patient was charged with assaulting a police officer. He alleged the officer was drunk and struck him a violent blow with a truncheon. His statement was proved to be untrue. Five weeks later he stole a van and two horses and made an obviously false excuse. He had by then become more excited, his relations were afraid of him and it was necessary to certify him.

A man who was depressed and deluded came under observation thirteen days after he had attempted to murder his wife and himself. His memory was good, but