The tear in the wall was repaired with Lembert sutures, which were themselves oversewn again. There was no trace of faeces on the peritoneum or of any material whatever from the colon.

The left kidney was normal, but the whole of the right kidney pouch was occupied by a large fluctuating tumour.

Then the abdominal incision was closed, and in view of an after-event it is worth while noting that the layers were all sewn up separately, the inner ones with Van Horn's gut No. 1, and the skin with medium silkworm gut.

The patient was turned on to her left side and a pillow placed under her side. After a hurried cleansing of the skin and painting it with iodine the kidney was exposed through the loin. As soon as the deep fascia was opened a lot of dark blood and clot escaped. The kidney was felt to be lacerated, with the laceration extending right through the kidney substance; but as the upper pole was much more badly injured than the lower, it was decided to remove that portion and put deep sutures in the remaining portion in the hope of saving half the kidney. This was done, and having cleaned out as much blood and clot as possible, the wound was closed, leaving a large cigarette drain reaching down to, but not touching, the remains of the kidney.

The patient was then returned to bed, but as she was in a very low condition continuous rectal salines containing adrenalin were administered. She rallied well and was feeling comparatively comfortable by evening. She only vomited once.

Next day (August 30th) she felt comfortable. The temperature varied from 99° to 101.4°, pulse from 116 to 134, respirations 24 to 32. There was a good deal of blood-stained discharge from the tube; this had diminished on August 31st, but the temperature rose to 103°. The bowels were opened three times.

On September 1st the patient complained of slight headache and nausea; the temperature rose to 105°, the respirations to 42, and the pulse to 140. A vaccine of *Bacillus coli* was administered in a dose of five million. She began to cough towards evening. The bowels were opened twice during the day. During the night she was delirious at times, but at 6 a.m. on September 2nd she had a profuse sweat and the delirium ceased. By mid-day the temperature was down to 101.6°. The cough grew more troublesome, and it was found that the right base was dull with diminished voice sounds. From the way in which this condition afterwards cleared up it seems probable that the lung was also crushed at the base, although the sputum never contained any blood. No rib was broken at the time of the accident.

On September 4th the condition was much the same, but the temperature dropped still further to 99.8° at 6 p.m. The abdomen was supple, and there was no abdominal pain. The bowels acted once daily. She slept fairly well at night. There was very little discharge on the dressing that day.

On September 7th at 6 a.m. the temperature had dropped to 99°, but when the dressing was changed there was a decided smell of ammonia. Otherwise the condition was much improved and the cough almost gone. She was on a light diet and ate food well. When the wound was dressed on September 8th there was a fair quantity of urine on the dressing although the tube had been shortened on the previous day, and on September 9th a renal fistula was well established. The temperature during the day reached 103°; the bowels were opened once; the diet was reduced.

On September 10th the patient felt very well. The only discomfort was irritation of the wound in the loin, due to the urine. The abdominal wound having healed by first intention, and union being apparently good, the stitches were removed and the binder replaced. The temperature still varied from 100° to 102.2°. She slept well and had no pain. As the bowels did not open on September 11th the nurse gave an enema at 7 p.m. The bowels acted without effort, but an hour later she awoke from a light sleep and called the nurse, and said that "her inside had fallen out"; the nurse raised the clothes, and saw coils of intestine protruding from the lower edge of the binder. I arrived at 10 p.m., and found that the abdominal wound had given way along its whole length, and the edges appeared smooth, as if varnished. I returned the bowels to the abdominal cavity, and sewed up with through-and-through stitches. When I removed these stitches ten days later perfect union had occurred, and there was no sign of early ventral hernia nor any division of the muscles.

For the next week she steadily improved, but on September 16th developed oedema of the legs affecting the right leg more than the left. The wound in the loin looked very unhealthy, large sloughs having formed along the track of the fistula, which was discharging urine and pus freely. The temperature also became remittent in type, although the patient herself was feeling very well.

On September 17th I removed her to the hospital, and on the following day reopened the wound in the loin. I found the remnant of the kidney in a very unhealthy state and decided that the best course to pursue was to remove it. Accordingly I tied off the vessels and ureter and removed the organ. Then swabbing out the cavity I sewed up the wound and left a small drain in.

For the next few mornings the cavity was syringed out with hydrogen peroxide solution and the temperature came down, gradually reaching normal on September 25th. By that time all the discharge had ceased and the wound was looking healthy. The oedema of the legs continued, but was now confined to the right leg, was slight and did not seem to be increased by exertion.

She eventually returned home on October 14th, after an

uneventful convalescence, and when last seen she was in the best of health and had put on 9 lb. in weight in the previous month.

The points of interest in the case are the trivial accident causing such disastrous results, and the spontaneous opening of the abdominal wound thirty-six hours after removal of the stitches on the tenth day. It is curious, considering the contamination of the peritoneum on the skin and dressings and binder, to say little of the friction of its surface by the dry dressings, that no infection resulted, but I have since heard of a similar case in a Melbourne general hospital after a hysterectomy, when the wound reopened on the day following removal of the stitches, just subsequent to the administration of an enema. In that case also no ill effects occurred.

As if to prove the irony of things, on the day that this patient left the hospital I admitted a child aged 1 year and 10 months, who had been kicked at close quarters by a big Clydesdale mare. The print of the hoof covered its abdomen, but the only injury received was a fracture of the right femur.

REFERENCES.

¹ and ² *Keen's Surgery*.

THE TREATMENT OF ACUTE GONORRHOEA IN MEN.

By J. G. HAYES, F.R.C.P. and S.IREL.,

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I FEEL convinced that, with very few exceptions, it takes on an average from two to three months to cure gonorrhoea. The general treatment consists of dieting, resting, and the taking of certain drugs. Butchers' meat, alcohol of any kind, strong tea or coffee, condiments and spices should be prohibited; milk and milk puddings, fish, chicken, eggs, vegetables, weak tea, water, and mineral waters may be permitted. Plenty of bland fluid is advisable, though in some cases of acute posterior urethritis lessening the fluid intake seems to lessen the urgency and frequency of micturition, and so gives a little more physiological rest to the inflamed membrane. If the patient can remain in bed for a week or two, well and good, but that is usually out of the question; consequently, it is advisable to instruct him to take no unnecessary exercise, to retire to bed early, and to avoid all sexual excitements.

It is best to start at once with urinary antiseptics, such as urotropin and cystopurin, for they tend to minimize the severity of the disease and shorten the acute stages; they may be continued for some weeks. When the anterior urethra only is affected, some alkaline diuretic may be given; and when the posterior urethra is involved, some of the balsams, though often their effect on the digestive system prohibits the latter, and they are by no means necessary.

In considering local treatment we may divide the urethra into (1) the anterior or movable urethra, and (2) the posterior or fixed.

The anterior urethra extends from the meatus to the bulb, is ensheathed in the corpus spongiosum, and is about 5 in. long. Its mucous lining is studded with many openings, larger (lacunae of Morgagni) and smaller (glands of Littre). Further back, opening into the bulbous portion, are the two ducts of Cowper's glands. The chief complication of anterior urethritis is stricture.

The posterior urethra, which embraces the membranous and prostatic portions, is about 2 in. long. It is usually involved about the second week of the disease, and as the ducts from the prostatic gland and the common ejaculatory ducts open into it, it is the source of the more serious local and systemic complications. Attempts to treat posterior urethritis by ordinary anterior injections are futile. Even when the anterior urethra only is diseased we are dealing with a delicate mucous membrane, and strong injections are to be deprecated.

In local treatment support of the parts is the first indication, and should be carried out by a support that will lift both scrotum and penis up against the abdominal wall. The meatus should be protected by aseptic wool, and sponged over with some antiseptic solution whenever

the opportunity arises, to prevent contamination of clothing.

Of the injection or irrigation methods recommended, Janet's appears to be the best. There are special irrigators made for this treatment with two-way nozzles by means of which the anterior urethra only may be lavaged or through-and-through irrigation carried out; the process is very simple and the results exceedingly satisfactory.

In the early stages, where the anterior urethra is affected, anterior irrigations of potassium permanganate (1 in 6,000 solution) will be found beneficial. It is best to use low pressure and only irrigate about the first three inches of the urethra, using a pint of solution at a time; it is well to do this twice daily. Should there be much pain or swelling of the penis, irrigations may be withheld until it subsides.

As soon as symptoms of posterior urethritis, indicated by urgency and frequency of micturition, are observed, through-and-through irrigation should be commenced, beginning with 1 in 10,000 solution potassium permanganate, very gradually increased from day to day till about 1 in 3,000 can be tolerated; the best temperature for the solution is between 95° and 100° F. At the end of a week or ten days the urine, which had previously been cloudy with pus, begins to clear, and small shreds or flakes may be seen floating in it; at this stage irrigations may be reduced to one a day. Complications such as prostatitis and epididymitis may arise, but they are so modified in extent that they are readily amenable to treatment.

When all acute symptoms have abated, it is well to make a rule of passing a Kollman's anterior dilator once a week, and stretching it very gradually and gently up till it meets with resistance; in any case it should not be stretched beyond 37 as indicated on the dial. This method serves the double purpose of expressing any secretions that may have got lodged in the glands of Littre or the lacunae of Morgagni, and at the same time acts as an excellent precaution against stricture.

Each dilatation should be followed by a through-and-through irrigation with a solution of potassium permanganate (1 in 6,000). At this period the prostate, seminal vesicles, and Cowper's glands should be examined, and, if necessary, massaged.

Through the courtesy of the senior surgeon of All Saints' Hospital I have had the opportunity of studying a great number of acute and chronic cases of gonorrhoea, and, regarding the treatment, the above are the conclusions I have drawn. The vaccines I have found more useful in the chronic complications than in the acute stages of gonorrhoea.

Memoranda :

MEDICAL, SURGICAL, OBSTETRICAL.

ANTITYPHOID INOCULATION.

A Speedy Method of Inoculating.

In the preventive inoculation of the troops with typhoid and other vaccines the following method may be of service where time is limited. By such a method I have been enabled to inject carefully graduated doses of vaccines and serums ($\frac{1}{2}$ c.cm. and 1 c.cm. doses) into mice at the rate of 60 to 80 an hour; even when an occasional animal has complicated matters by a temporary escape.

The vaccine, contained preferably in a 20 c.cm. bottle, is poured into a cold sterile watch-glass or Petrie dish and sucked up into a cold sterile all-glass 20 c.cm. syringe, graduated into $\frac{1}{2}$ c.cms. This is done more rapidly without attaching a needle. Some twenty to forty sterile needles boiled in water to which a little soda has been added should be available, as also a pair of sterilized dressing forceps for picking out the needles. In the case of 1 c.cm. doses as many as twenty inoculations can be made from one syringe by merely throwing off a needle after each inoculation and affixing another. The men being lined up, an assistant (unqualified), slightly in advance of the operator, prepares the skin with 2 per cent. iodine, and another assistant behind the operator repeats the iodine application so as to seal the puncture with iodine after the inoculation. The chief precaution to

be observed is to keep the needle pointing downwards to prevent the weight of the piston drawing into the syringe the tissue fluid from the last man inoculated. A fairly long needle will also prevent this reflux, as also the gradual removal of the needle towards the end of the inoculation.

If such precautions are observed the procedure is as safe as any other, and with men as the subjects instead of mice, should enable any one to perform at least eighty inoculations an hour. Those accustomed to inoculation on the large scale will no doubt have their own methods, but I put the suggestion forward chiefly to Territorial R.A.M.C. officers who may not previously have been called upon in this way.

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LOCALIZATION OF FOREIGN BODIES.

THE following is a simple, and, as far as I am concerned, original, method of localizing an embedded foreign body by means of the x-ray tube and fluorescent screen.

The part should first be so thoroughly cleansed that little will be needed immediately before the surgical exploration. The couch and under surface of the screen

should be covered with sterilized material. A rubber band of suitable size is then made to encircle the limb at the level of the foreign body. This band carries on it four small metal rings or pieces of bent wire, which can be moved along it, but not too easily. Two observations are then made with the rays, and the rings moved with forceps till they cover the

foreign body above and below in two widely different planes. If they have been carefully placed and the limb properly rotated, the body will be found at the intersection of the two lines joining the opposite rings; and it can be approached from whatever direction best suits the anatomy of the part.

I have not tried the method in many cases, since experience is rather limited here, but think I ought not to keep it to myself any longer; I desire rather to throw it out as a suggestion to others, with a good hope that it may be found practical.

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GALYL IN SYPHILIS.

THE medical profession should give a thorough trial to the merits of galy as an antisyphilitic. Since reading the article on it by Dr. Johnston Abraham in the BRITISH MEDICAL JOURNAL (March 14th, p. 582) I have employed it extensively with excellent results. Nearly all my cases have given a negative Wassermann reaction after three injections (35, 40, and 45 cg.), and this, though not a positive proof of cure, is at least satisfactory. I do not think galy as good a general tonic as neo-salvarsan, but it certainly produces a negative Wassermann reaction in shorter time. It is cheaper, and it is made in Paris.

JOHN HARTIGAN,
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MALARIAL FEVER WITH SEVERE CEREBRAL SYMPTOMS.

A. P., a negro boy aged 11 years, was admitted to the Public Hospital, Buff Bay, Jamaica, West Indies, on June 11th, in a comatose condition. Reflexes were absent, and soon after admission he passed urine and faeces involuntarily. He seemed in a dying condition. The thoracic