to treat a few cases which presented symptoms of profound toxic poisoning with a stock vaccine prepared from an old and very avirulent strain, but the great majority of the cases received autogenous vaccines. The disparity in numbers between the two groups is too great to allow of any comparison of results.

Mortality.

There were two deaths in this series—a percentage mortality of 3.1. The “favourable” and “unfavourable” groups supplied one death each.

The patient belonging to the former class came under treatment on the third day of the disease; he appeared to be progressing most satisfactorily, when he suddenly developed acute bronchopneumonia, and died of this complication two days later.

The other fatal case had already had several haemorrhages before coming under treatment—about the fifteenth day of the disease. She appeared to react neither to her own infection nor to the vaccine, which was administered most cautiously. She had several other haemorrhages, one of which terminated fatally.

Complications.

With the exception of the fatal attack of bronchopneumonia mentioned above, all the complications and relapses were confined to the 11 late cases. Three of this group suffered from haemorrhage subsequent to coming under treatment; of these, one—the second fatal case—had had haemorrhages previously, as already noted. In another the single haemorrhage occurred only the day after treatment was begun.

Two cases suffered during convalescence from localized staphylococcus infections; these can hardly be considered typhoid complications, since they might occur with equal readiness in any other debilitating condition. These complicating infections yielded to autogenous staphylococcus vaccines. There were no other complications.

The “unfavourable” group supplied the only two relapses that occurred. Two of the cases were pregnant, but both passed through the attack without mishap.

Results.

The results in the cases under treatment early were most striking. There is no doubt that the disease was rendered definitely milder, and most of the patients progressively improved from their first or second injection. Three showed a constant and progressive fall of temperature after each injection, but this marked sequence was not a usual feature. The most striking point was the absence of symptoms other than the pyrexia; the headache, lumbar pains, abdominal distress, etc., disappeared, and the patients felt well and slept well; they did not look ill. In the words of one Mauritius practitioner, “My vaccinated enterics give me no anxiety.”

From such small numbers it cannot be said that the disease was distinctly cut short, although there seemed to be clinical evidence of this in several instances; certainly the period of convalescence was markedly shortened owing to the mildness of the course and the freedom from distressing symptoms and complications.

These remarks apply especially to the “favourable” group; the advantages of vaccine treatment in the late cases were much less marked, and sometimes there was no appreciable benefit whatever. In spite of the small actual numbers, the distribution of deaths, complications, and relapses in the 11 late cases and the 52 others respectively, is significant. In no case did the treatment cause any appreciable ill effects.

Dosage.

The dosage varied with the age and condition of the patient, but for well-built adults the initial dose was usually from 150 million to 300 million. Increasing doses were given at two or three days' interval. In two cases only was the dosage controlled by opsonic observations. The largest dose given to any patient in this series was 1,500 million.

Of the 63 cases of enteric fever, 7 were treated in the military hospitals, and I am indebted to superior authority for permission to include these; my thanks are due to several Mauritius practitioners for permission to include the remaining 56. These latter were regarded largely in the nature of test cases, and were discussed from time to

time at the meetings of the medical society. The results obtained were considered so satisfactory that vaccine therapy is being adopted in the civil hospitals, and generally throughout Mauritius, as routine treatment for enteric fever.

Paratyphoid and Other Infections.

A smaller series of paratyphoid fevers was treated during the same period on similar lines; with one exception all these cases ran a mild course, and there were no deaths.

Amongst the cases regarded as possibly enteric fever until the result of the blood culture became evident may be mentioned—streptococcal endocarditis (one case); septicaemia due to *B. coli communis* (two cases), to *B. lactis aerogenes* (one case), to a bacillus of Group “G,” subgroup “m,” variety 14* (one case), and to a bacillus of Group “H,” subgroup “d,” variety 14* (one case). In the limited literature available I can find no record of the two last-named organisms having been isolated from the blood before. However this may be, their occurrence is probably sufficiently rare to deserve mention.

HERNIA OF THE UTERUS, VAGINA, AND FALLOPIAN TUBES IN A BOY.

BY

L. R. BRAITHWAITE, M.B., Ch.B.Vict., F.R.C.S.Eng.,
LEEDS;

AND

WILLIAM CRAIG, M.B., Ch.B.Edin.,
BINGLEY.

THE following case is recorded, first because it is a very good example of “hermaphroditism” in a boy of 14, and secondly because it illustrates what must be excessively rare contents in the hernial sac of a male.

Virchow in 1872, Boddaert in 1875, Marchand in 1883, and others at a later date have reported cases of reduplication of the genitalia.

There is a specimen in St. Bartholomew's Hospital of a man aged 44. He had the normal conformation of a man with a beard and a full sized penis. He was married, and is said to have had two children. The bladder and external organs of generation were those of a man in whom neither testis had descended into the scrotum. Internally the uterus masculinus and vagina were unusually developed. The uterus, which was nearly the size of that of an adult female, lay between the bladder and rectum, and was enclosed between two layers of peritoneum to which on either side of the uterus were attached the testes.

At a meeting of the British Medical Association in London in 1895 the internal organs of a child who died after operation for inguinal hernia were shown. There was a normal bladder with prostate gland. Projecting backwards were a vagina, uterus, and broad ligaments, round ligaments and Fallopian tubes, with testes in the position of the ovaries.

On May 16th we operated at the Bingley Cottage Hospital on a boy aged 14 years, Dr. Dixon giving the anaesthetic.

The boy was the youngest of a family of eight children. The oldest child is a male; the others are all girls. None of them exhibit any unusual anatomical condition. In addition to the living family the mother had four stillbirths, the first at full time, when both the child's feet were deformed, and three at three months.

The mother said that the boy had always been “boyish” in his ways and habits, fond of boxing and other athletic pursuits. About his sixth year he developed enuresis, which had continued to the present time, but was always most marked when he had discomfort in the region of the hernia. His voice began to break about a year ago, and at the same time he complained of pain in the nipples; the mother found a swelling, which she described as hard and lumpy and the size of a pigeon's egg, round each nipple. As this was only noticed for two or three days, she did not take him to see a doctor. A few months later there was a recurrence of the condition, which lasted less than twenty-four hours; it had not recurred since. Until the hernia began to trouble him he never had occasion to see a doctor.

* Classification of “bacilli which neither ferment lactose, nor liquefy gelatine,” as in Local Government Board Report, 1911-12, etc.

The external conformation of the boy was perfectly normal. There was some growth of pubic hair; the penis was unusually large and perfectly formed. There was no alteration in the formation of the scrotum, and the perineum was not dimpled. The right testis had not descended; on the left side there was a normal-sized testis lying horizontally at the bottom of a hernial sac which reached to the lowest limit of the scrotum. The sac contained what was thought to be omentum, which could be traced up to the internal ring as a thickened cord.

The usual oblique incision was made in the left inguinal region and the hernial sac exposed. Slight traction resulted in delivery of the whole sac on to the surface of the left thigh, bringing with it the left testis.

An incision was made into the sac, and the testis, lying horizontally, was drawn upwards; with it there appeared a perfectly formed Fallopian tube, having no apparent direct connexion with the testis.

Pulling the testis downwards brought into view the whole of the internal organs of generation of a female (as shown in the drawing), with the exception that the positions usually occupied by the ovaries were filled by testes.

The uterus was deep red in colour and the normal size for a female of this age; it lay between two layers of peritoneum, was slightly bicornuate, and traces of round

ligaments passed away from its two cornua forwards. The lower part of the uterus ended in a thickened cone at the cervix, and from this there passed off a wide band of fibrous tissue in the position of the vagina; this band of tissue ran up into the abdomen behind the bladder and became lost on the pelvic floor. The vaginal tract did not appear to be hollow at any part.

Behind and below the uterus on either side lay a perfectly formed Fallopian tube; attached to each at its free end was a hydatid of Morgagni. There was a fine fibrous band passing from the uterus below the attachment of the Fallopian tubes to the region usually occupied by the ovaries. These bodies (proved to be testes) lay horizontally, and were attached to the broad ligament by a mesentery. They were of the normal size for a boy of 14, but devoid of epididymis or of vas deferens; in shape they were ovoid, the surfaces being shiny, smooth, and clear white, except for a few areas of a light brown tint apparently due to fat. From the lower part of each testis a sheaf of large veins ran up into the abdomen.

The mobility of the whole sheet of tissue containing the organs was remarkable, and the organs could be drawn out exactly as we have shown it in the sketch, made immediately after the operation.

The question of treatment presented considerable difficulty. Excision of the whole area would have been easy, but removal of the uterus and tubes alone would have been difficult. Reposition of the testis on the left side might have been the correct thing to do, but separation of its blood supply could not be ensured.

Eventually it was decided to close the opening in the sac and return the whole to the abdomen; this was very easily done, and the usual radical cure for hernia performed. The boy made an uninterrupted recovery.

A portion of each testis was excised and sent for microscopical examination; the report states that both are testes with some excess of fibrous tissue.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

ACUTE VARICOCELE DUE TO THE PRESSURE OF A GREATLY DISTENDED LEFT KIDNEY (NON-MALIGNANT).

C. J., aged 38 years, came to my out-patient department complaining of a large varicocele on the left side, which had developed during the preceding six weeks. Inquiry elicited a history of intermittent haematuria and left renal pain extending over several years, and on examination a large fluctuating tumour could be made out in the left lumbar region, while the cystoscope showed a "pus shoot" from the left ureter.

The kidney was removed intact after resecting the twelfth rib. It contained several branched calculi and a large amount of pus, and weighed 5½ lb. There was no evidence of a neoplasm. The patient made an uneventful recovery and his varicocele rapidly subsided.

The appearance for the first time of a left-sided varicocele in an adult suggests carcinoma of the corresponding kidney, and clinical teachers love to dwell on the point as being a good example of "diagnosis by induction" based on an accurate knowledge of the destinations and modes of termination of the spermatic veins.

This case is recorded to demonstrate that non-cancerous lesions of the left kidney may also give rise to an acute varicocele.

Sheffield.

SINCLAIR WHITE.

MEMBRANOUS NON-DIPHTHERIAL LARYNGITIS.

THE rarity of this condition and the fact that primary membranous laryngitis is almost universally attributed to diphtheria are sufficient to justify a review of the following case. It may also, as far as it goes, afford slight proof that our predecessors in medicine were not altogether wrong in differentiating between diphtheritic and non-diphtheritic croup, especially in adults. It is also noteworthy because, although it is common knowledge that there have recently been many cases of membranous pharyngitis characterized by high fever, great pain in swallowing, the presence of a membrane clinically indistinguishable from diphtheria and limited to the tonsils, with absence of the Klebs-Loeffler bacillus and of paralytic sequelae, this is the only case I have heard of in which the membrane has appeared in the larynx.

On May 24th, 1914, I was consulted by a married woman, aged 32, on account of pain in swallowing. The only explanation she could give of her illness was that she had been dusting a very dusty room two days previously. Beyond slight congestion the pharynx was normal, and there was no loss of voice; the case was regarded as one of mild pharyngitis. The next day the pain was much worse, there was tenderness over the larynx, and the patient could only swallow liquids and even those with the greatest difficulty, so that she practically starved herself for several days. She only spoke in a whisper. On laryngoscopic examination congestion of the whole larynx was seen with marked oedema of the arytenoids and aryteno-epiglottidean folds. Respiration was forced, and the patient was afraid that she might choke. Inhalations of compound tincture of benzoin were ordered, the room kept steamed, and antiphlogistine applied externally. Cocaine lozenges failed to relieve the pain of swallowing. There was frequent dry, painful cough. The following day (May 26th) a pearly-white membrane, apparently diphtherial, was seen on both arytenoids, in the inter-arytenoid region, and on the epiglottic folds, but the swelling was less and the temperature, which the day before was 103°, had come down to 101°. Antitoxin was injected and a swab taken, but the report