

(2) normal spleen; (3) other organs apparently no naked-eye change.

A rat was inoculated with pus from the base of the brain, and died after fourteen days; films made from the spleen and inguinal glands showed cocco-bacilli morphologically identical with those found in the guinea-pig. Cultures upon agar and serum agar of the pus from base of brain of the patient showed numerous colonies after twenty-four hours at 30° C., these being shown to be composed of an organism identical with that isolated from the gland in the neck.

In addition to the above investigations cultures were made from the blood of the patient during life and *post mortem* from the heart, but all proved negative for enterica or for septicaemia.

The interesting features about this case were:

1. The morphological similarity of the isolated organism to *B. pestis* (pleomorphism, bipolar staining). The cocco-bacilli seen in the smears of the guinea-pig's spleen and in those from the rat might possibly have been confused with *B. pseudotuberculosis rodentium*, but the animals were shown to be quite healthy before inoculation.

2. The meningococcus may at times assume a somewhat variable morphology, but the presence of bipolar staining and filament forms is unusual.

3. After about three subcultures upon agar the character of bipolar staining had disappeared, there being only deeply staining cocco-bacilli, occurring for the most part in pairs.

Finally, sugar reactions of a pure subculture corresponded in all respects with those given by *B. pneumoniae*—that is, a complete fermentation (AC + G) with all the ordinary sugars.

Clinically the case was unlike one of bubonic plague; the duration of the illness and the fact that the cervical glands are rarely affected (about 5 per cent. of all cases and then generally in children),<sup>1</sup> also the rarity of meningitis as a complication, all tended to negative the diagnosis of plague.

Cases of "larval plague" might possibly simulate such a case, but these are uncommon except when occurring during an epidemic.

*B. pneumoniae* varies somewhat in its cultural and morphological characters, according to the body medium in which it is growing—in this case a gland, and finally the cerebro-spinal fluid; bipolar staining is stated to be a fairly common variation in cases where the organism is passed through a guinea-pig or rat, and is a point which should be borne in mind.

#### CASE II.

Pte. Y. was admitted to hospital with clinical signs and symptoms pointing to a meningitis. No enlarged cervical glands were found and Kernig's sign was absent. A specimen of cerebro-spinal fluid was sent for cytological and bacteriological examination but gave entirely negative results; this specimen being quite clear and yielding upon centrifugalization only a few mononuclear leucocytes. A second specimen of cerebro-spinal fluid was sent next day, and this time was opaque, a film from the centrifugized deposit showing polymorphs in large numbers and a few coccoid and cocco-bacillary organisms which were Gram-negative as to staining. A culture of this deposit (pus) on Loeffler's serum gave, after twenty-four hours at 37° C., numerous opaque greyish-white shining colonies which proved to be composed of Gram-negative cocco-bacilli, occurring for the most part in pairs. The sugar reactions were as follows: Glucose, AC+G; lactose, AC+G; mannite, AC+G; saccharose, AC+G; dulcitol, AC+G; thus definitely showing that typical *B. pneumoniae* was the infecting organism. This strain grew well and rapidly upon agar at 37° C., and cultures showed a certain amount of pleomorphism.

This patient made a good recovery.

The author's thanks are due to Major Ferguson, R.A.M.C., Director of the Military Bacteriological Laboratory, E.E.F., for his assistance in carrying out the animal inoculations, etc., in connexion with Case I, and to Captain Campbell, R.A.M.C., of the same laboratory, for performing the *post-mortem* examination in the author's absence.

#### REFERENCE.

<sup>1</sup> Stitt, *Tropical Diseases*.

OF four hundred Serbian doctors in practice before the war, it is stated that in August fewer than one hundred were left.

THE Paris Neurological Society is organizing an annual meeting which neurologists and psychiatrists of various countries will be invited to attend. The first will be held in Paris in July, 1921, and will extend over two days. The question proposed for debate is the clinical forms and the treatment of syphilis of the nervous system.

## Memoranda:

### MEDICAL, SURGICAL, OBSTETRICAL.

#### RADICAL CURE OF FEMORAL HERNIA BY THE INGUINAL ROUTE.

AN operation for radical cure of femoral hernia I have performed for several years past has given perfect satisfaction and can be thoroughly relied on, provided there is asepsis. The method has been described in the *American Journal, Surgery, Gynecology, and Obstetrics*, September, 1918. The idea is to produce a closure on the ball valve principle.

##### The Operation.

Make a sufficient incision just below and parallel to Poupart's ligament. Expose the sac and its coverings. By gauze dissection free the sac and its coverings up to the femoral canal. Pulling on the sac, with a blunt dissector separate the attachments in the femoral canal. Open the sac and split it well up to the ring. Free adherent omentum and reduce the contents if possible. Now dissect up skin and fascia well above Poupart's ligament and incise the external oblique aponeurosis a quarter to half an inch above Poupart's ligament and parallel to it. Retract the cord or round ligament inwards. Incise the transversalis fascia from the spine of the pubes upwards and outwards, parallel to Poupart's ligament. Curved artery forceps are now passed up from the thigh through the femoral ring, external to the sac and coverings, to the abdominal aspect, and there the points of the forceps are exposed in order to see that the way is free and that there is sufficient room. From above, curved artery forceps are now passed downwards on to the thigh, and one half of the sac and its coverings are seized and pulled upwards to the abdominal aspect, and then the other half is made to follow suit. Examine the opening and free any further adhesions if present. Carefully, with needle and catgut, suture the neck of the sac high up, leaving the distal part intact. Now with needle and catgut stitch the sac and its coverings, till it assumes the shape of a ball, about half as big again as the abdominal aspect of the femoral ring. This size can be gauged with the finger. Finally, leave two long ends of this last piece of catgut at the distal portion of the ball. Curved forceps are now passed upwards from the thigh, through the canal, and the two terminal ends of catgut are seized and pulled downwards through the femoral canal on to the thigh. Gently pull these two ends of catgut till the ball of sac has been well wedged down beneath the transversalis fascia, which thoroughly blocks the opening at the abdominal aspect of the femoral ring. Thread one of the catgut ends on a needle, and this needle takes up a portion of the pectineal fascia, then the needle is withdrawn and the two ends tied together, thus steadying the ball valve of sac on the abdominal aspect of the femoral ring. The result is obvious that the more the patient strains the firmer the closure. Suture divided structures.

Patients can be guaranteed a cure, and can be got out of bed in a week. One of my last patients was a gentleman of about 70, whose hernia was strangulated, and he was home and walking about in a fortnight. The operation is a little tricky, and is best carried out by a surgeon of experience.

Edinburgh.

J. W. DOWDEN.

#### POLYCYTHAEMIA IN MITRAL DISEASE.

IN April of this year a Chinese girl, 16½ years of age, was admitted to the Victoria Hospital, Hong Kong, under my care, complaining of great dyspnoea and distress on the slightest exertion. She had fainted several times lately. Both the girl and her mother were of the uneducated class, and a history was difficult to elicit, but it appeared that although the condition had existed for some years it did not date back to early childhood. The girl was slightly built, her breasts were quite undeveloped, and she had never menstruated.

The heart's apex beat was somewhat heaving and diffuse, and 4½ in. to the left of the mid line in the fifth intercostal space. The right border of the heart extended ½ in. beyond the right border of the sternum. There was a marked presystolic thrill and definite presystolic and systolic bruits at the apex; the latter conducted into the axilla. The second sound at the pulmonary base was much accentuated, and after any slight exertion a very soft, blowing, mid-diastolic murmur could be heard at the pulmonary base, conducted down the left border of the sternum. This apparently was due to a certain degree of incompetence of the pulmonary valve, induced by long-standing high pressure in the pulmonary circuit, secondary to the damaged mitral valve. No signs of congenital abnormality could be made out. There was a slight cough throughout, with a few crepitations at the bases of both

lungs. There was no enlargement of spleen or liver, and the urine was normal.

There was at no time any cyanosis; the girl always looked pale and her conjunctivae were almost blanched. Her fingers were long and tapering and there was no trace of clubbing. The blood count was, therefore, surprising:

Red blood corpuscles	...	...	7,600,000
White blood corpuscles	...	...	8,200
Haemoglobin	...	...	90 per cent.
Colour index	...	...	0.6

The girl remained in hospital for six weeks, and with good food, rest, and digitalis her condition improved considerably. Two further blood examinations were made, the figures on both occasions agreeing closely with the first count.

H. M. CAMBRON MACAULAY, B.Sc., M.R.C.S.,  
Hong Kong. L.R.C.P., Captain R.A.M.C.(S.R.).

#### BEZOLD'S MASTOIDITIS WITHOUT HISTORY OF AURAL SUPPURATION.

C. F., aged 32, was referred to me by her physician, Dr. John Halahan. She was complaining of a severe headache which had been almost continuous for two or three days. Dr. Halahan, in the absence of any indication of aural trouble, and having exhausted other possible causes in his investigation, nevertheless suspected the mastoid as the source of trouble.

I learnt that the headaches had occurred at intervals in the last two and a half years, lasting some days and disappearing; there had been no discharge at any time from the ear; she had had measles in childhood. There was a perforation in the anterior and posterior inferior quadrants of the tympanum. The tympanic cavity contained a clear secretion. I was struck by the extreme sensibility of the posterior wall of the aural canal, out of all proportion to the small amount of inflammatory reaction. Pressure over the antrum and point of the mastoid caused pain.

In consultation with the physician we resolved on a radical operation, to which the patient objected. I saw her again five days later. The headache was very severe, the temperature was 38.5° C. in the axilla, and there were other symptoms of general infection. The aural canal was dry, but, as before, there was clear secretion in the tympanic cavity. The point of the apophysis was very tender, and there was marked tumefaction of the tissues of the neck—in short, an undoubted perforation of the inner surface of the apophysis.

I operated on the same day, making the usual retro-aural incision, and extending it below over the sternocleidomastoid. Deepening the incision in the neck I found multiple small abscesses and a large one internal to the muscle. The region around the antrum was very eburnated and contained caseous material, whilst that of the point of the mastoid consisted of large cells containing thick pus.

After removal of the diseased bone and the extirpation of the apophysis of the mastoid, I made a plastic flap and closed the post-aural incision completely. Drainage of the lower incision with iodoform gauze and tamponing through the aural canal completed the operation.

The patient complained of headache for three days afterwards, but in five weeks made an uninterrupted recovery.

DOUGLAS W. SIBBALD, M.D.,  
Surgeon to the Ear, Nose, and Throat Department, Alvear  
Hospital, Buenos Aires, Republica Argentina.

#### ACUTE YELLOW "ATROPHY" DURING PREGNANCY TREATED BY CAESAREAN SECTION.

Mrs. B., aged 42, was admitted to the Oldham Union Infirmary on the evening of May 1st, 1919. She was seven and a half months pregnant, and had had four previous normal confinements, the last being twelve years ago. She had been vomiting for a fortnight. She was profoundly collapsed, constantly retching, and vomiting faecal, blood-stained material. She was deeply jaundiced, the tongue was dry and brown, the pulse feeble, and the temperature subnormal. There was tenderness of the liver and spleen, and the area of liver dullness was much diminished. The os uteri was not absorbed and the cervix was rigid. The urine contained a large amount of albumin, and crystals of leucin were found on microscopic examina-

tion. The mental condition of the patient was strange, and her conversation quite incoherent.

It was decided to evacuate the uterus as rapidly as possible, and Caesarean section, under ether, was performed by Dr. Frank Radcliffe, the visiting surgeon. The anaesthesia was as light as was consistent with safety. The fetus was found to have been dead some time, but the placenta, membranes, and endometrium were normal; the liver was tucked away under the ribs and was yellowish. At the conclusion of the operation the patient's pulse was 68, and the temperature 97.4°; she was very collapsed. She was put on rectal salines of glucose and sodium bicarbonate, and a mixture containing tincture of iodine (one minim) was administered hourly.

Vomiting ceased from the time of operation and the patient's recovery was rapid. She was almost ready for discharge, the wound having healed perfectly, when she had a sudden attack of dyspnoea and died in a few minutes, fifteen days after operation.

Post-mortem examination showed death to be due to pulmonary embolism. There was yellow mottling of the liver, which was soft and friable, and enlarged, its weight being 61 oz. The kidneys and spleen were congested. The heart was normal.

In the literature at my disposal I cannot find any reference to the treatment of this condition by Caesarean section, but the rapidity and safety by which delivery in this way could be effected were the deciding factors in the choice of treatment. I wish to thank Dr. R. P. Parker, the Superintendent Medical Officer, for permission to record this case.

MARY G. CARDWELL, M.B., Ch.B.,  
Resident Assistant Medical Officer.

Union Infirmary, Oldham.

## Reviews.

### SURGERY OF THE LUNG AND PLEURA.

DURING the present century a great deal of attention has been paid to the surgery of the lungs and pleura, of late particularly so in the case of gunshot wounds of all sorts. These of course have received treatment for the most part near the battle front, or at any rate within fifty miles of the spot where they were sustained. Since the year 1916 both French and English army surgeons have done a vast amount of work illuminating the subject, and an excellent account of the present position of the treatment of wounds of the lung and pleura is furnished in Mr. Fagge's translation of Professor GRÉGOIRE and Dr. COURCOUX's French book<sup>1</sup> on the subject. This is divided into three parts, the first dealing with aseptic wounds of these tissues, the second with infected wounds, the third with the late sequelae of such wounds in general. It is not possible to summarize the conclusions reached by these authors or their translator, nor the evidence upon which they are based. It may be said that the expectant line of treatment generally adopted in the first half of the recent war was replaced in its second half by more active and ambitious forms of surgical interference—applied early in the severer cases, without much delay in those of intermediate type, and held in readiness for the milder cases. As Professor Duval put it, "every chest wound of serious aspect should be operated on"; and Mr. Fagge adds that effusions of blood into the pleura should be evacuated without undue delay by aspiration. The book is well written, and has been admirably translated; its subject matter is really part of the surgery of war, but much of it is applicable to cases of injury that are not rare even in times of peace.

The more ambitious and much more expensive volume on the *Surgery of the Lung and Pleura*,<sup>2</sup> by Mr. MORRISTON DAVIES, gives a detailed account of the whole subject, based mainly on the author's own experience in this branch of surgery; it is designed for the use of surgeons. Beginning with a chapter on anatomy, in which the bases

<sup>1</sup> *Wounds of the Pleura and of the Lung*. By R. Grégoire, Professor of the Faculty of Medicine, Paris, and A. Courcoux, Physician to the Hospitals of Paris. Translated and edited by C. H. Fagge, F.R.C.S. London: University of London Press, Ltd.; Paris: Masson et Cie, 1919. (Cr. 8vo, pp. xxiii, 222; 44 figures. 7s. 6d. net.)

<sup>2</sup> *Surgery of the Lung and Pleura*. By H. Morriston Davies, M.A., M.D., M.C., F.R.C.S., Hon. Captain R.A.M.C.(T.). London: Shaw and Sons, 1919. (Cr. 4to, pp. xxiv + 260; 80 figures. 25s. net, postage 6d. extra.)

## Universities and Colleges.

### UNIVERSITY OF LONDON.

#### GUY'S HOSPITAL: ASTLEY COOPER PRIZE FUND.

UNDER the authority of the Charity Commissioners, the trustees of the above fund, who are the physicians and surgeons to Guy's Hospital, have been empowered to establish a studentship in connexion with the Gordon Museum of Guy's Hospital. The student will be elected for a period of three years, and will be called the Astley Cooper Assistant to the Curator of the Gordon Museum. The present value of the studentship is about £150 per annum, with an additional sum of £50 for expenses.

In accordance with the terms of Sir Astley Cooper's will, the studentship shall not at any time be awarded to any member of the staff of Guy's or St. Thomas's Hospital or to anyone related by blood or affinity to them.

Particulars regarding the studentship can be obtained from Mr. C. H. Fagge, M.S., Guy's Hospital, London, S.E.1, to whom application for the post should be addressed on or before October 15th, 1919.

#### ST. BARTHOLOMEW'S HOSPITAL AND COLLEGE.

The following awards have been made:

Entrance Scholarship in Arts (£100): F. A. Bevan. Jeaffreson Exhibition (£50): R. N. Curnow and H. F. Hiscocks (equal). Senior Entrance Scholarship in Science (£75): J. N. Kerr. Junior Entrance Scholarship in Science (£100): E. J. Blackaby and A. B. Cooper (equal).

### UNIVERSITY OF LEEDS.

At the Court of the University on September 24th a resolution was adopted in the following terms:

The Council deplore the heavy loss which the university has sustained by the premature death of Dr. W. Angus, Professor of Public Health, and record their appreciation of the great service which he rendered to the School of Medicine and to the citizens of Leeds by his scientific insight, public spirit, and devotion to duty. They desire to express their deep sympathy with Mrs. Angus in her bereavement.

The Pro-Chancellor, Mr. A. G. Lupton, who presided, said that during the war a large proportion of the staff of the university was absent on national and military duties, and since the coming of peace a number of professors had left the university staff and many appointments had been made. The financial position had been difficult, but he hoped that the future would be free from anxiety in this respect. With the enlarged scope of the work and the increased number of students, he foresaw that within a short time the university would have to call upon its friends for funds for additions to the buildings, appliances and facilities to enable the work to be adequately performed. Further developments of the medical school and a larger number of students had caused the council to purchase adjoining property, which was being fitted for this new purpose. A new hall, a new library, and a new students' union were wanted.

A list of names for honorary degrees was submitted and approved; it included Sir Alfred Keogh, G.C.B., G.C.V.O., C.H., and Sir Almroth Wright, K.B.E., C.B.

### UNIVERSITY OF ST. ANDREWS.

The following candidates have been approved at the examination indicated:

THIRD M.B., CH.B. (*Materia Medica*).—Isabella D. Kilgour, Nona S. Lesslie, Katharine D. Macfarlane, Gracie MacG. McRorie, Elizabeth W. MacVicar, W. L. Tullis.

## Medical News.

DR. A. J. RICE-OXLEY, C.B.E., J.P., has been unanimously nominated Mayor of Kensington for the coming year.

A GALTON SOCIETY for the study of the origin and evolution of man has been formally constituted in New York.

DR. J. MACKENZIE BOOTH, Lecturer on Diseases of the Ear, Nose, and Throat in the University of Aberdeen, left personal estate of the value of £43,160.

A COURSE of lectures on tuberculosis will be given throughout the autumn session at the Hospital for Consumption and Diseases of the Chest, Brompton. The lectures will be delivered on Tuesdays and Fridays, at 8 p.m., during October, November, and December, commencing October 21st.

IN 1918 the number of persons who underwent the anti-rabic treatment at the Paris Pasteur Institute was 1,805. Of these, 5 died of hydrophobia, a percentage of 0.27. One of the patients, however, was attacked by the disease while under treatment, and another attended irregularly. Deducting these cases, the true death rate was 0.16 per cent. In the first year of the application of Pasteur's method the mortality was 0.94 per cent.

THE Secretary for Scotland has appointed Dr. H. Ferguson Watson and Dr. W. D. Chambers to be Deputy Commissioners of the General Board of Control for Scotland, in place of Dr. R. Cunyngham Brown, who has been appointed Director of Medical Services in the Ministry of Pensions, and Dr. C. Macpherson, who has resigned.

THE University of Liège has conferred the degree of Doctor of Medicine *honoris causa* on M. Clemenceau and Mr. Hoover.

AT the instance of Dr. Heyerdahl of Christiania, a Scandinavian society of medical radiologists has been formed. Its first meeting is to be held in Copenhagen in 1921.

THE French University of Strasbourg will shortly issue to all allied universities an invitation to send delegates to their inauguration ceremony, which is to take place on November 22nd, the anniversary of the entrance of French troops into the city.

THE American Public Health Association will hold its annual meeting at New Orleans in October (27th to 30th). The chief subject of discussion will be the health problems of the South, including malaria, typhoid fever, hookworm disease, and soil pollution.

THE provision of rewards for motherhood initiated by the late Dr. F. Nuñez in Cuba has extended widely over the island, each of the six provinces being allotted a proportion of the prizes. This year forty-one of the 112 municipalities are offering prizes in the campaign for healthy children.

THE University of Toronto has received a bequest of £10,000 from the late Dr. Julius Mickle of London, a graduate of the university. It is to provide two fellowships—one in honour of the donor's parents, the other to be awarded to the student of the university who passes highest in his or her third or fourth year.

THE London Medical Exhibition, promoted by the *British and Colonial Pharmacist*, has not been held during the war. The ninth exhibition will be opened on Monday next at the Central Hall, Westminster. Medical men, for whom alone it is intended, are invited to visit it on any day next week between noon and 7 p.m.

PROFESSOR WILLIAM H. RAPPAUD of the University of Geneva has been appointed general secretary of the League of Red Cross Societies. He is a member of the International Committee of the Red Cross, and was for two years associate professor of economics at Harvard University.

AMONG the war prizes awarded by the French Académie des Sciences are the three Montyon prizes of £100, given respectively to MM. Louis Martin and Auguste Pettit, of the Pasteur Institute, for a memoir on ictero-haemorrhagic spirochaetosis; MM. Weinberg and Seguin, of the same institute, for a research on gas gangrene; and MM. Rouvillois, G. L. Pédeprade, and A. Basset for their studies on war surgery. A prize of £120 was awarded to M. Paul Ravaut for his researches on paludism, and one of £80 to M. Goris for studies on the localization of alkaloids and glucosides in vegetables and on the preparation of catgut.

THE late Professor Pozzi was a great connoisseur. His collection, which includes fine examples of mediaeval, Renaissance, and modern art, representative pictures of the best schools, tapestries, Persian miniatures, porcelains, Chinese statuettes and bronzes, Gothic wood sculptures, Oriental carpets, Louis XIII, Louis XIV, and Louis XV armchairs, is to be sold.

THE Minister of Public Instruction of the Republic of Uruguay has officially published the general conclusions of the second South American congress of infant hygiene held recently at Montevideo. The congress called on governments to institute a campaign of prophylaxis and assistance for tuberculous children, and advised that suspected cases should be removed from schools and placed in special institutions. Instruction on the prevention of tuberculosis, syphilis, alcoholism, hydatid cysts, and paludism should be given in all schools. The principles of child-rearing should be taught in all primary schools. The strictest uniformity in the collection of statistics should be enforced. A special death certificate should be required for infants in which the fact of illegitimacy and the dietary should be stated. Special precautions should be taken in the early conceptive period and continued till the completion of convalescence. Prizes and grants for nursing women in institutions of infant protection should be founded. Midwives should be supplied to rural districts at the public expense. The need of pre-natal prophylaxis of purulent ophthalmia and stringent precautions against the introduction of trachoma by immigrants are insisted on. Dental dispensaries should be attached to all schools.