

Reports of Societies.

ROYAL SOCIETY OF MEDICINE.

SECTION OF MEDICINE.

Thursday, March 3rd, 1910.

Dr. MITCHELL BRUCE, President, in the Chair.

Pericarditis.

SIR JOHN BROADBENT reopened the discussion on pericarditis. He observed that effusion was more frequently met with in adults than in children, and that the prognosis was more favourable. Nothing could be more unfavourable than the prognosis in the relapsing pericarditis so frequently seen in rheumatic children, in which effusion was seldom met with, and in which the pericardium became adherent to the dilated heart. The difficulty of diagnosing between pericardial effusion and a greatly dilated heart without effusion was often very considerable. It was now generally recognized that an extreme degree of cardiac dilatation was commonly met with in rheumatic pericarditis, more especially in children, which was frequently associated with general adherence of the pericardium to the heart, whereas effusion to any great extent was comparatively rare, hence mistakes in diagnosis based on rapid increase of area of the cardiac dullness were less liable to be made.

Dr. W. P. HERRINGHAM said that he had seen two cases in which the heart was punctured in the belief that the pericardium was full of fluid, and in neither case did it seem to do any harm.

Dr. PASTEUR expressed the hope that physicians would acquire the habit of making use of the orthodiagraph in the bedside examination of patients. If it could be shown that pericarditis inhibited diaphragmatic movement, this, by inducing massive collapse, would afford an adequate explanation of some of the physical signs occurring at the left base in cases of pericardial effusion.

Dr. PORTER PARKINSON said the difficulty of the diagnosis of pericarditis was well known, especially of those cases that came on insidiously without local pain and without friction sounds being heard. On that account he wished to mention the occasional presence at the commencement of a pericardial effusion of a sign which was usually supposed to be one of late development only—he referred to signs of compression of the lower lobe of the left lung. It was generally acknowledged that the differential diagnosis between pericardial effusion and dilated heart with adherent pericardium was difficult, and sometimes almost impossible. He thought that in cases in which there might be any doubt it was better to call in a surgeon, who could cut down slowly and feel his way, ascertaining the actual condition of things before the pericardium was opened.

Dr. CYRIL OGLE said that whilst observing a patient some years ago, who was subsequently operated upon and was proved to have the pericardium distended with fibrin and pus, he was struck by the condition of the large veins in the neck. The external jugulars were permanently distended, even when the patient was sitting up, and showed no pulsation at all. He thought that this immobile distension might be of value as distinct from the full veins with pulsation which were usually seen with dilated heart, and might indicate an obstruction by pressure of the fluid to the entry of blood into the heart in a case of pericarditis.

Dr. IRONSIDE BRUCE demonstrated by means of *x*-ray photographs that the outline of the shadow of the pericardium thus affected was sharp.

Mr. LYSTER observed that *x* ray examination could be used for diagnosing even small quantities of fluid in the pericardium.

Dr. POYNTON said that in childhood it was difficult to distinguish between pericardial effusion and dilatation, but he was convinced a large effusion was rare. He had never seen a rheumatic case which needed paracentesis.

Dr. ALEXANDER MORISON said that an analysis of 44 cases of acute pericarditis and adherent pericardium showed that the 12 cases which presented no concurrent endocarditic lesion were cases in which the inflammatory process had spread to the pericardium from the neighbourhood, and were the result of tuberculosis, pneumonia, and empyema. The chief point of clinical interest lay in the

diagnosis of cardiac dilatation from pericardial effusion. Referring to treatment, he deprecated therapeutic activity in non-purulent cases when the collection of fluid was limited, but in the event of pericardial exploration being indicated, he preferred the removal of a rib cartilage and cautious incision to puncture with a sharp needle. He related a case in which such an operation revealed an adherent pericardium and dilated heart, the examination of which by puncture would probably have been disastrous.

Dr. C. R. BOX and Dr. G. G. BUTLER communicated some remarks on pericarditis with effusion, based on cases collected from the records of St. Thomas's Hospital; and Dr. SAMUEL WEST replied.

SECTION OF ANAESTHETICS.

AT a meeting on March 4th Mr. R. GILL, President, in the chair, Dr. DUDLEY BUXTON opened a discussion on the *Choice of an anaesthetic*. He pointed out that this must be made by considering (a) the state of the patient, (b) the exigencies of the operation, (c) the skill and experience of the anaesthetist. The choice also depended on the method adopted. The safety of the patient must be the predominant aim. The old rules which pronounced for certain anaesthetics for certain ages must be discarded, and each individual case decided by the physique and standard of health, not by the actual age. Both young children and old persons frequently took ether well, and the belief that infants and women in labour enjoyed immunity from risk in chloroform was exploded. Predisposition to after-effects, respiratory, circulatory, renal, or hepatic, had to be recognized, and an anaesthetic selected which did not initiate the dangers to which the patient was most prone. Trivial operations often were attended with special dangers from the anaesthetic—for example, circumcision, which did not require chloroform, since young children took ether well by the open method. Dr. BUXTON deprecated the use of nitrous oxide or ether in obstructive conditions of the upper air passages, such as in goitres; also in lesions of the brain and spinal cord. Morphine, except in certain cases, was dangerous when given before chloroform. Chloroform with oxygen, and given in exact percentages of strength, was safe; given otherwise it was always liable to cause danger. He recommended nitrous oxide or ethyl chloride followed by ether as a routine anaesthetic, while in prolonged operations he preferred to change from ether to chloroform when complete muscular relaxation had occurred.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Wednesday, March 2nd, 1910.

Dr. BYROM BRAMWELL, President, in the Chair.

The Place of Athletics in an Educational System.

Dr. BURN MURDOCH said that it could not be disputed that active regulated exercise had a beneficial effect both upon general growth and upon local distortions and displacements. The great value of athletics was unanimously appreciated by the heads of the leading schools of the country; and they now occupied an indispensable place in the education both of boys and girls. In this movement, Dr. Almond, of Loretto, had been the pioneer. The term, "athletics," included games such as football, cricket, and systematic developmental exercises; each department was essential and complementary to the other. Athletics, properly regulated and supervised, were of supreme value in school life. They raised the intellectual standard, as Dr. Morgan's statistics in *University Oars* showed; and above all, they developed those elements of character—self-control, endurance, courage, unselfishness—which made for success in life. It was also the unanimous verdict of head masters that athletics did much to keep a high standard of moral purity in schools. Against these benefits were to be placed the risk of accidents and overstrains; but these were reduced to a minimum by careful medical supervision and by grading the boys according to physique. There was also a tendency to undue interest in press reports to the exclusion of other interests.

The PRESIDENT in opening the discussion, invited non-medical guests present to take part.

Dr. THOMSON described the system of physical training introduced by Dr. Almond into Loretto, of which he had a long experience as medical officer. Every boy had a month of preliminary exercise, which was valuable as preparatory for the full system of training. Again, after severe exertions at games, or cross-country runs, physical and mental rest was enforced for the remainder of the day. The benefit was specially marked in the case of feeble and delicate boys. In many cases he had seen dull apices clear up in from six months to two years.

Mr. SMITH (Morchiston Castle School) insisted on the two-fold nature of the ideal physical training—games and gymnastics. Games without systematized exercises were dangerous. Proper regulation greatly reduced the risks of games. To abolish these risks entirely was impossible; nor was it desirable, for these had their value in the moral training of games.

Mr. CATHCART, speaking of the average physique in public schools, gave statistics to show that for the boy at entrance this was higher than was the case twenty years ago. This was an indication of a general improvement of physique. As an old Loretto boy, he described the aims of Dr. Almond as, first, character; then, physical vigour; lastly, mental instruction.

Mr. TILLARD (Cargilfields School) thought there was a danger in training the younger boys too fine. It was not wise to race a two-year-old colt; and so, also, there was risk in training to a high pitch boys at or about the age of puberty. It was at that period that the risk of overstrain was greatest.

Captain DUNLOP (Loretto) said that educational gymnastics must go along with games, and maintained the superiority of the modern developmental exercises over the old gymnastic apparatus of parallel and horizontal bars, etc.

Dr. STRONG said that Nature and instinct were the only safe guides for exercise in children. Other young animals—for example, the kitten and the lamb—regulated their exercises entirely in that way. The introduction of compulsion in physical training was, in his view, wrong. He agreed that there should be a gymnasium in every school, but it should be a place where the boys would be free to take exercise as they willed.

Dr. RITCHIE said that it was at the period of most rapid growth that there was most danger of overstrain. The age incidence of that period varied, but it was then that medical supervision should be most strict.

Dr. MCKENZIE JOHNSTON insisted on the importance of regular daily exercise both in the young and in adults.

Mr. STILES said a regular supervision of the physical training of young boys was of extreme importance, and should have preference over mental training. Those movements that developed trunk muscles and chest expansion were especially necessary, and for that reason the exercise of swimming was of great value. It was, however, rather neglected. A large swimming pond should form part of the equipment of every well appointed school. He also directed attention to the importance of an examination of the boots of young children. Wearing down at certain parts gave indication of commencing knock-knee, bow-leg, etc. These could then be easily corrected by thickening the soles at other parts.

Dr. WOOD said that, as medical officer of a school for boys between 8 and 14 years, he had found less illness since the school game had been changed from Rugby to Association football. Personally he had been opposed to the change, but meantime it seemed to have had this result.

DRS. GOODALL, CHALMERS WATSON, FLETT, SLOAN, and J. V. PATTERSON also spoke.

Dr. BURN MURDOCH replied.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF PATHOLOGY.

Friday, February 4th, 1910.

ARTHUR H. BENSON, F.R.C.S.I., President, in the Chair.

Pyonephrotic Kidney.

MR. L. G. GUNN, in exhibiting a specimen of pyonephrotic kidney, said the patient had only one of the symptoms commonly associated with the condition—namely, some tenderness in the region of the kidney. He had been

sent for on December 12th, 1909, to see a lady who had apparently some intestinal obstruction. She had had typhoid fever about eight weeks before. During convalescence she had had two or three attacks of vomiting, and the day before he saw her vomiting had recurred with a rise of temperature, and was stercoraceous. At the time he thought the case one of either septic infection of the gall bladder with adhesions in the hepatic flexure of the colon, or a malignant growth in the large bowel. He treated her with olive oil injections. The tumour subsided, vomiting stopped, and she got very much better. In a few days, however, another attack came on, and he advised an operation. On cutting down on the large bowel they found it pushed out of place by the kidney lying behind it. He freed the bowel to some extent, satisfied himself that there was no definite lesion in it, closed the wound, then turned the patient over and removed the kidney. The pelvis was full of pus, and a stone was seen in the kidney. The ureter was normal. The fact that the urine was normal increased the difficulty of diagnosis. He found it hard to realize that a stone or kink could make the obstruction. The kidney was quite fixed, and he thought the condition in some of such cases was possibly due to a spasm in the upper part of the ureter. They might, therefore, have to look for a nervous origin in a good many of the cases, and there might be a similar condition present in muscular coats of the bowel causing temporary obstruction.

Rare Sequels of Typhoid Fever.

Dr. DAY exhibited a specimen of ulceration of the larynx following enteric fever. The patient was a man about 30, who was taken into hospital in advanced enteric, and with a bad alcoholic history. He lived only a few days, but shortly before he died he coughed up a good deal of very fetid mucus, which evidently came from his larynx. He exhibited the specimen because of its rarity. In another case of advanced enteric with bad alcoholic history, the patient improved for about ten days, and then got a rigor, for which no cause could be found. They found the liver dullness increased, and on examination they got some bloody fluid with the needle. Afterwards they got some pus, and thought he was suffering from empyema. Part of a rib was removed, but only about a teacupful of bloody serum was found, and no pus. He sank and died, and they found an infarction in the lower lobe of the right lung.

Professor WHITE said the infarction was very small. From it he got some typhoid bacilli. He also got several kinds of cocci, including a streptococcus, which in its first cultivation was extremely long. His reading of the case was septicaemia following enteric fever. In the specimen of ulceration of the larynx the ulcer was lower than the usual position. There were no bacilli; the organism in the pus was one of the ordinary staphylococci.

Dr. PARSONS recalled a case in which a tracheotomy had to be done on account of the patient's difficulty in breathing. Immediately afterwards surgical emphysema developed, and the swelling spread all over his body right down to the groin. The *post-mortem* examination revealed a very similar condition to that shown in Dr. Day's first specimen. He asked if the infarct was embolic, and whether he had cardiac signs.

Dr. GOULDING referred to a discussion on the subject of emphysema, at which Dr. Croly, who had performed the operation referred to by Dr. Parsons, said the emphysema was not the result of the operation, but of the condition of the lung.

Dr. DAY, in reply, said he had seen three such cases, and in none of them had he seen emphysema. The patient probably died from intense poisoning. The second case had no heart symptoms other than the usual softening associated with bad enteric.

Pulmonary Diphtheria.

Dr. DAY also exhibited a specimen showing tracheal and pulmonary diphtheria from a girl aged 7 years, who had been reported three days ill from "croup." It was evident she was suffering from pulmonary diphtheria, and her condition was so bad that they had to operate. She improved considerably for about thirty hours. Then symptoms of further obstruction lower down in the lungs showed themselves, and she died. She coughed up casts of the bronchial tubes. It was peculiar that in spite of

20,000 units of antitoxin the membrane regrew, and had grown over the trachea and down into the bronchial tubes. After the operation the case went through the moist form of the disease, but next day the dry form came, which nearly always terminated fatally. One lung was almost completely blocked.

Professor WHITE said the larynx was completely blocked by the diphtheritic membrane. The lumen of the trachea was almost completely filled with the exudations. The cut surface of the lung showed most of the bronchi quite filled, though some were partly free. Microscopic sections of the accompanying bronchopneumonia showed a great tendency to necrosis.

Dr. DAX, in reply to Dr. Gunn, said they did not go in for large doses, and they apportioned the dose to the severity of the disease rather than the size of the patient. They gave 4,000 units, and repeated sometimes twice, sometimes three times. In reply to Dr. Harvey, he stated that he could not say if any other organism was present; they nearly always diagnosed diphtheria from the clinical aspects. Swabs in bad cases very often gave negative results. The case was one of the first to show him that diphtheria might start in the lungs and work upwards.

Professor WHITE said that in a recent case, which seemed as if an abscess in the tonsil had burst, the culture gave ordinary streptococci. The low temperature, however, still suggested diphtheria. Next day a swab gave an absolutely pure culture of diphtheria bacilli. As regards Dr. Harvey's question of the association of some other virulent organism, he had not investigated that point as the lung sections were full of diphtheria bacilli.

Sarcoma of Femur.

Dr. HARVEY exhibited a specimen of sarcoma of the femur taken by amputation from a girl aged 15. Three months before admission to hospital she had had a cycle accident. Six weeks later she noticed a swelling on the leg, which gradually increased in size, and at the time of admission was slightly painful, with some increase of local heat. The specimen showed a large swelling at the lower end of the femur which seemed to invade the centre of the bone, but the greater part was subperiosteal. At first sight microscopically he thought it looked like a carcinoma, but from the radiograms, which he showed, it was a typical periosteal sarcoma, and histologically alveolar.

After remarks by Mr. GUNN, Dr. STOKES, Professor WHITE, and Dr. HAYES,

The PRESIDENT said that if any analogy could be drawn from the action of sarcomata within and without the eye, he agreed that it was easy to have the walls practically intact. Such sarcomata grew very slowly for a long time inside the eye, but as soon as they got through the sclerotic they grew with great rapidity. The microscopic sections generally determined easily the internal origin of such growths.

Dr. HARVEY, in reply, said he called it a periosteal sarcoma more or less from the clinical point of view, but a true periosteal sarcoma, involving only the periosteum, seemed to be exceedingly rare. It was very difficult to determine in which direction the tumour had broken through.

Valvular Stenosis of Heart.

Dr. MOORHEAD exhibited a heart showing tricuspid and mitral stenosis. The patient, a girl aged 28, had been admitted to hospital about ten days before suffering from symptoms of severe cardiac failure. On first admission she had a distinct thrill, and a distinct presystolic and systolic murmur, the presystolic being extremely loud over the ensiform cartilage. The presystolic murmur and the thrill both disappeared, and only the systolic murmur persisted. There was a suspicion that she might have, in addition to mitral, a tricuspid stenosis. Later on a double murmur was heard, and he regarded the second as due to aspiration by the right ventricle of blood through a stenosed tricuspid orifice in its diastole. The heart was found to weigh 18 oz. On the right side it showed enormous dilatation and hypertrophy of the right auricle. The terminal muscle stood out in a very striking way. Marked tricuspid stenosis was shown: at the necropsy he could only get one finger through the orifice; the right ventricle was dilated and hypertrophied. On the left side there was a good deal of dilatation and hypertrophy of the left auricle, and in the left ventricle extreme mitral

stenosis. The mitral cusps were both calcified and extremely rigid. There was no recognizable aortic murmur, although the aortic valves were also sclerosed. There were some pulmonary infarcts. Both kidneys were extremely irregular on the surface, suggesting congenital lobulation. Looking more closely, he thought it might be the result of multiple infarction.

Remarks were made by Professor O'SULLIVAN and Dr. BOXWELL.

Dr. MOORHEAD, in reply, said he considered the tricuspid stenosis directly secondary to the mitral, and did not think pre-existing congenital deformity was to be looked for in every case.

Encysted Haemo-pericardium.

Dr. BOXWELL exhibited a specimen of encysted haemo-pericardium from a man aged 32, who had been sent to hospital in June with what was supposed to be an enormously enlarged liver. He came to the conclusion that the liver was not so much enlarged as displaced. The patient gave a history of an attack of influenza in March, during which he had suffered from a pain in his chest. The acute attack passed off in about a fortnight, but during convalescence a swelling was noticed in the abdomen, and he then became progressively weaker. When admitted he was deeply cyanosed, and could rest only in the sitting posture or leaning forward. The liver dullness extended a handbreadth below the costal margin, while its upper limit was depressed. He had a left-sided pleural effusion, and a large dull area in the middle of his chest. The heart sounds were rapid and feeble, but there were no murmurs or friction sound. There was no fever. Assuming the displacement of the liver, the diagnosis lay between pericardial effusion and intrathoracic tumour. The pleural fluid was blood-tinged, and this suggested tumour. As the patient was becoming rapidly worse, it was deemed advisable to puncture the pericardium with an exploring needle. This was done in the usual situation, and a syringe full of red blood was drawn off, which clotted naturally in a few minutes. Visions of a displaced and punctured auricle prevented further interference. The patient now developed a loud friction rub on the right side, and in the course of a day or two died. At the *post-mortem* examination a huge encysted haemo-pericardium was found. The inner compartment was quite complete, showing a wall of leathery fibrin, with papillary projections on the inner surface, and containing about a quart of red blood. The part of the cyst wall clinging to the ventricle was partially organized. In the outer compartment was a smaller quantity of blood-stained sero-fibrinous fluid. A large haemorrhage was found in the right lung corresponding to the friction rub. The liver was but little enlarged. The case demonstrated once more the futility of exploring the pericardium with a needle instead of resecting a rib.

Professor O'SULLIVAN and Dr. STOKES commented on the specimen.

Tuberculous Spleen from a Pig.

Professor METTAM exhibited a tuberculous spleen of a pig. The normal weight of the spleen was about 140 grams; the specimen weighed 1,410 grams. The condition was one which was usually received as being of the nature of Hodgkin's disease, probably because there was always difficulty in finding the bacillus, but that morning he had found a couple of tubercle bacilli in the film.

SECTION OF MEDICINE.

Friday, February 18th, 1910.

Dr. LITTLE in the Chair.

Types of Imbecility.

Dr. BOYD BARRETT showed the following cases:

1. The first case was one of *Acquired imbecility*.

The patient was a boy, J. B., aged 5½ years, who was unable to speak articulately. He understood everything said to him, and was somewhat obedient. He did not walk until he was 3 years old. He was subject to fits of temper. His face was marked by congenital syphilis, the bridge of the nose was sunken, and his mouth scarred. His mother had had several miscarriages. He was the only child that lived. Syphilis was the most common cause of secondary or acquired imbecility. It was also the cause in childhood of that fatal mental degeneration, analogous to general paralysis of the insane in adults, called "juvenile general paralysis." The latter was a progressive and fatal disease. The boy, however, enjoyed good health. He was getting stronger every day, and what probably occurred in his case was that, owing to the syphilitic virus, a dystrophy, malformation, or anomaly of structure in the brain took place in fetal life.

2. The second case was of the *Genetous type in imbecility, with single ptosis.*

The patient was a girl aged 10 years. She was quiet and diffident. She had a pale, unhealthy colour, her left eyelid drooped, and she showed that type of face and chest which was associated with adenoids. Her expression was vacant, her speech jerky and indistinct. The family history on the mother's side was extremely good. The father did not drink to excess. Both parents and the other children in the family were healthy. However, all the near relations on the father's side drank excessively. The child's paternal grandmother was said to have "died of drink." The stigmata of degeneration present were: (1) Physical stigmata—vacant expression; Gothic palate; winged ears, with deficient helix. (2) Physiological—nocturnal enuresis to age of 9; faecal incontinence to age of 7; slow in learning to walk and talk. (3) Psychological—body restless; rhythmic movement of hands; cannot be taught to read, write, or sew; loses temper easily; loves dirt and mud. With regard to the prognosis, Dr. Boyd Barrett said that from the grosser defects of childhood she had emerged, but further progress was unlikely. It only remained to answer two questions: Would she live long? Would she be able to earn her livelihood? The answer to both must be in the negative.

3. The third case was of the *Mongol type.*

J. O. H., aged 5 years, was a typical case. With the possible exception of umbilical hernia and congenital heart disease, he had all the chief signs and symptoms of Mongolism. He was restless and chattered unintelligibly but ceaselessly. The complexion was fair. The eyes were oriental, and marked epicanthic folds were evident. He used to dribble and protrude the tongue, but in these respects he had improved somewhat. He had a curious incurvation of the little finger. The head was brachycephalic. Although he was 5 years old he could not walk. He was late in sitting up, late in teething, and late in observing. Mongolism was such a serious condition, with such a bad prognosis for life and utility, that it was of the utmost importance to recognize it.

Dr. KIRKPATRICK, referring to the case of Mongolism, said he had been on the watch for the Mongol spots in children. The stigma was fairly common in Europe, but he had not met with any, or seen any recorded, in Ireland.

Dr. DAWSON said the case bore out the modern idea of Mongolian idiocy. The old idea of syphilis was more or less exploded, and it was now held that it was due to malnutrition of the fetus *in utero*, occurring, as it did, when a child was born at the end of a long family. It had been pointed out that the little finger and thumb in such cases were always abnormally short; those symptoms were present in the case. There was also a slightly spotted condition of the child's iris.

Dr. BARRETT replied.

Pseudo-hypertrophic Muscular Paralysis.

Dr. DEMPSEY showed two cases of boys, brothers, aged 11 and 12. There was nothing peculiar about the family history, except that an uncle had had some nervous disease. When the elder boy was 5 or 6 years of age his mother noticed that he commenced to trip, and had difficulty in going upstairs. In a couple of years he had difficulty in walking, and now, about six years after the onset, he had to be carried. The younger boy was in good health up to a couple of years ago, when he commenced to suffer in the same way. He now showed the combination of atrophy and hypertrophy, which was characteristic of the disease.

The Physico-therapy of Sciatica.

Dr. M. ORB, who read a paper on this subject, divided cases of sciatica, for purposes of treatment, into two classes—acute and chronic—and made no distinction between cases as to their pathology. For the former class he relied chiefly on hot applications and very gentle massage combined, of course, with absolute rest in bed. Blistering and acupuncture he never employed. For chronic cases, massage, hot and cold douches alternately applied (Scottish douche), and active and passive exercising of the affected limb. All treatment was directed to an endeavour to increase the rapidity of the circulation through the affected part.

The CHAIRMAN was sure they would all endorse his experience that, among the immense variety of sciatic cases, he had had some that he wished would go to any one else. He knew a lady who had ruined the reputation of several physicians and surgeons. He had had an unsatisfactory experience of the surgical treatment of nerve stretching, and his opinion was that in what were called acute cases the one remedy was absolute rest.

Dr. CRAIG was accustomed to deal with neuralgic cases as distinct from the neuritic, and there was no doubt that neuralgia of the sciatic nerve had to be treated in much the same way as neuralgia of any other nerve, and generally yielded to antineuralgic treatment. The neuritic cases, however, gave a great deal of trouble. He had been introduced to Corrigan's button many years ago, and had the greatest belief in it, with, of course, some little medical treatment as well. Nerve stretching was, he believed, associated with considerable danger. A patient of his had had his nerve stretched during his absence, and died subsequently of myelitis. He believed that the hypodermic injection of morphine was one of the few things that gave rest when pain was severe.

Dr. ORB replied.

Acute Leukaemia.

Drs. TRAVERS SMITH and EARL read a paper on this subject.

A servant girl, aged 20, was admitted to the Whitworth Hospital under the care of Dr. Travers Smith on November 2nd, 1909. She had only complained of ill health for a fortnight previously. It was found that the glands on the right side of the neck and left axilla were enlarged, and that she was very anaemic. A blood examination showed signs of so-called acute lymphatic leukaemia. She only lived for twenty days after admission. During that time the spleen enlarged rapidly, as did the glands in the neck. The temperature varied between 101° and 103°. Almost the whole of the interior of the mouth became gangrenous. Moderate diarrhoea persisted. Four days before death the temperature fell by crisis. Dr. Earl made the blood examination and performed the autopsy. The blood when first examined contained 60 per cent. of haemoglobin, 3,024,000 red cells per c.mm., and 192,000 white cells per c.mm. Of the white cells about 8 per cent. were small lymphocytes and 88.7 per cent. were transitional cells. In the course of six days the red cells had diminished to 1,776,000 per c.mm. and the haemoglobin to 30 per cent. The white cells remained about the same as at the first examination till death occurred, but the lymphocytes increased to 22 per cent. of total white cells. At the *post-mortem* examination the spleen was very much enlarged, weighing 1,650 grams; the marrow of the shaft of the femur was reddish-grey and gelatinous in appearance; the glands were not enlarged, except those in the anterior mediastinum and left axilla, which were tuberculous. The marrow of the femur contained mainly cells with a strong resemblance to the transitional cells found in the blood, and few cells containing neutrophile granules. The lymphatic glands contained besides lymphocytes a good many transitional cells. The liver was enlarged, but not increased in weight. On section a frothy fluid escaped, and an anaërobic organism with the characters of *Bacillus phtegmones emphysematosae* was isolated from the organ.

HARVEIAN SOCIETY.

Thursday, March 3rd, 1910.

Dr. HANDFIELD-JONES, President, in the Chair.

Pubiotomy in Contracted Pelvis.

Dr. G. F. BLACKER opened a discussion on the treatment of labour in contracted pelvis, with special reference to the justifiability of pubiotomy. He said that of recent years there had been a remarkable revival of the operations for enlarging the pelvis, and in view of the distinguished obstetricians who practised and taught these operations, it was necessary that the teachers of midwifery in this country should state their position with clearness, and put on record the reasons which led them to prefer other methods of dealing with these cases. For the purpose of considering the subject Dr. Blacker divided contracted pelvis into four classes. The first included pelvis with a conjugate diameter of 2½ in. or less, all of which should be treated by abdominal section in all circumstances. The second included pelvis with a conjugate diameter of 2½ in. to 3 in., in which the ideal treatment was the performance of Caesarean section either before the onset of labour or in its early stages. In conditions not suitable for the performance of Caesarean section the patient should be delivered, if forceps and version failed, by craniotomy or embryotomy. The results of Caesarean section were so good, when practised as an operation of election, that the indications for its performance should be extended to pelvis with a conjugate diameter of as much as 3½ in. The fourth class of pelvis included those with a conjugate diameter of 3½ in. or more. In this class the best results were obtained by spontaneous labour at full term. The third and most important class included those pelvis with

a conjugate diameter of between 3 in. and 3½ in. It was in this type of pelvis that the greatest difference of opinion existed, and in which they were asked to substitute pubiotomy for the induction of premature labour, the application of high forceps, the performance of version, or the practice of craniotomy. It was said that the induction of premature labour gave bad results. What were the facts? The maternal mortality was practically *nil*; not only that, but the patients recovered even better than after a full-term delivery. The fetal mortality, the great drawback to the operation, was certainly high, and amounted in 81 cases of induction performed in University College Hospital to 25.8 per cent., 61 children leaving the hospital alive at the end of a fortnight. There was no evidence to show that the mortality of premature children during the first year of life was excessive; indeed the figures, as far as they went, tended to show that it was not greater than that of full-term children. The maternal mortality of pubiotomy was, in the best hands, about 2 per cent., and the fetal mortality was 7 per cent., while the maternal morbidity was at least 40 to 60 per cent. of all cases. The ill effects which might follow this operation were many and serious. As compared with Caesarean section performed before the onset of labour pubiotomy presented no advantages either to the mother or to the child. When compared with the induction of labour, however, the problem was a more difficult one. The immediate danger of pubiotomy was greater than that of the induction of labour, and it was likely to be followed by a number of serious complications which were entirely wanting after the performance of induction. On the other hand, pubiotomy had a fetal mortality of not more than 7 per cent., while the induction of premature labour in contracted pelves was likely to be followed by a fetal mortality of at least 25 per cent. Dr. Blacker thought that, in any case where it was deemed inadvisable to perform Caesarean section or in which this operation was refused by a patient in whom the previous induction of premature labour had resulted in the birth of one or more dead children, she might be allowed to go to full term and that pubiotomy might then, if necessary, be performed. There were a small number of pregnant women in whom the performance of even so comparatively safe an operation as Caesarean section would be attended with considerable risk and in whom the risk of pubiotomy, carried out in proper surroundings, would be less than that of an abdominal section. An additional advantage of this plan of treatment would be that in many cases the necessity for pubiotomy would not arise, since spontaneous delivery might occur, a result which was attended with the minimum of risk to both the mother and the child. If the patient was in labour when seen, and the head failed to engage or was arrested at the brim, then if moderate traction with forceps failed for the forcible delivery of the head through the brim—an operation which entailed a fetal mortality of at least 40 per cent.—or for the performance of version, associated as it was with even a higher fetal mortality, Caesarean section should be preferred. If the case was one unsuitable for Caesarean section, then pubiotomy should certainly be done in preference to craniotomy on the living child. Pubiotomy should, however, be performed only when it was certain that the child's life had not been endangered, and, in view of the serious complications which might follow, it was not an operation suitable for private practice. Dr. CHAMPNEYS emphasized the higher value of the mother's life compared with that of the fetus. He considered Caesarean section a fine operation; its risks were slight to the mother, very slight to the child, and its after-effects *nil*. In all these respects pubiotomy compared unfavourably with it. If for any reason Caesarean section was inadmissible, he would prefer craniotomy to pubiotomy, as it had no risks for the mother, the so-called maternal mortality of craniotomy being due, not to the operation, but to the conditions requiring it. He advised the induction of premature labour in slight degrees of contraction diagnosed during pregnancy. As a teacher he thought that to recommend pubiotomy to the body of the profession would be to court disaster. He would like to know how many pubiotomies had been performed in private on intelligent patients who could appreciate what was going to be done to them. All change was not progress, and England was not a country which depended for

initiative on foreign work. He pointed out that abdominal surgery had been rendered possible through Lister and Spencer Wells, and that amongst obstetricians there were no greater names than Smellie, Denman, Rigby, and, later, Matthews Duncan. Dr. HERMAN looked for improvement in the mortality and morbidity of childbirth mainly to the improvement of Caesarean section. The mortality attending this operation in 1904 was 8 per cent., but he saw no reason why it should not be reduced far below this. Caesarean section stood alone among abdominal operations in this respect, that all the structures dealt with were healthy and normal. The operator who had to remove a tumour might find difficulties from its vascular supply, adhesions, etc., but in Caesarean section nothing of this kind existed, and there ought to be no mortality where the routine procuring of asepsis was regarded as a religious ritual. He did not agree with Dr. Blacker in thinking that symphysiotomy was about equal to pubiotomy in difficulty. Subcutaneous symphysiotomy was one of the simplest and easiest operations. Pubiotomy seemed to him a difficult and tedious operation. He had never done it or seen it done, and at present did not intend to do so. The real objection to both operations was the injuries to the soft parts involved in the separation of the bones after division. He thought Dr. Blacker gave away the case for pubiotomy when he said he thought it ought only to be performed in hospitals. What was the use of treatment that could not be employed in ordinary private practice? Lastly, he should have liked to hear more stress laid upon methods of ascertaining the size of the child, as he thought that was as important as pelvimetry. Dr. W. S. A. GRIFFITH pointed out the difficulty of obtaining precise measurements of pelves, and gave an account of some experiments he had made. The conclusion he arrived at was that no exact measurements could be taken unless the whole hand was introduced into the pelvis or the pelvis was contracted to 3 in. or less. He considered that practice based on precise pelvic measurements, even if they could be obtained, was a mistake; many other factors were equally important. He recommended Caesarean section where the head would not enter the brim of the pelvis. Dr. HERBERT SPENCER supported the induction of premature labour, and declared that statistics of fetal mortality were unreliable unless similar conditions obtained or cognizance were taken of individual features, such as the method or time of induction. Whether the child grew up depended largely on the care it received from its mother. He had induced labour six times in one woman, and she had as a result five healthy living children; he mentioned many other cases of multiple premature inductions in his practice. He regarded individual cases like these as of more importance than statistics. He thought Dr. Blacker placed the elective Caesarean section a little too high (3½ in.), thereby excluding some cases suitable for induction of premature labour. He had induced labour at the thirty-fifth week in a woman with a conjugate of 3 in., and the child, which weighed at birth 5 lb., was now a healthy girl of 18. He thought there were risks from scars and adhesions following Caesarean section from which the mother was quite free after the induction of premature labour. The percentage of morbidity following pubiotomy was too high for him, and, unlike other operations, it could not safely be repeated on the same patient. He had never seen any convincing evidence that pubiotomy was superior to symphysiotomy, and most of its advocates agreed that it was only suitable for hospital practice and in non-infected cases. The crucial question raised by Dr. Blacker was, what was to be done in the case of patients in labour when the pelvis was too small to allow the head to pass? His answer would depend upon circumstances. He would not exclude craniotomy; he would prefer Caesarean section if the patient had been skilfully attended, and would remove the uterus or do a retroperitoneal Caesarean section rather than do pubiotomy where there was infection or laceration of tissues. Dr. Gow did not think it possible to measure the pelvis accurately even with the hand inside, and regarded such measurements, even if obtained, as of secondary importance. Induction at the thirty-sixth week, or Caesarean section if labour had started, were better than pubiotomy for the size of pelvis indicated. He could only conceive of one condition in which pubiotomy might be indicated, namely, in a case

that had been many hours or days in labour, with the head jammed in the pelvis, rendering delivery by Caesarean section a matter of great difficulty. He would never do pubiotomy as an operation of choice, and would even prefer to do craniotomy. Dr. AMAND ROUTH thought there was no doubt that, if the woman was seen before full time with a conjugate of over 3 in., induction was the correct treatment. If a mistake of too late a date should be made, and dystocia were still present, the obstetrician could fall back upon Caesarean section, pelviotomy, or embryotomy. If the conjugate was under 3 in. he would prefer to do Caesarean section at full term. Cases seen for the first time at full term should be divided definitely into two classes—those where previous attempts had, and had not, been made to deliver *per vias naturales*. In cases where no attempt to deliver had been made with a conjugate up $3\frac{1}{2}$ in. and a living child, Caesarean section should be done; but if the child were dead, craniotomy, provided the conjugate was over $2\frac{1}{2}$ in. The difficult cases to decide in this class were those where the child was alive and the conjugate between $3\frac{1}{2}$ in. and $3\frac{3}{4}$ in.; these were, in his opinion, the only cases where pelviotomy was justifiable, and he preferred the subcutaneous symphysiotomy to pubiotomy, as the former operation could be more safely repeated, if necessary, at a future labour; personally, even in these cases, he would prefer to do Caesarean section. In the second class, where attempts had been previously made to deliver, with resulting bruising and infection, neither conservative Caesarean section nor pelviotomy was justifiable, and he considered embryotomy indicated if the conjugate were over $2\frac{1}{2}$ in., and Caesarean section followed by hysterectomy if under $2\frac{1}{2}$ in. He instanced his last case of Caesarean section in this class, where subsequently sloughs formed both on the child's head and over the mother's abdominal wound. This case had decided him to avoid Caesarean section in future in all possibly septic cases. The PRESIDENT congratulated Dr. Blacker on his paper, and considered, having regard to the results of Continental operators, that English obstetricians had exercised a wise discretion in their attitude to the operation of pubiotomy. Dr. BLACKER replied.

UNITED SERVICES MEDICAL SOCIETY.

At a meeting of this society on January 12th, Surgeon-General BRANFOT in the chair, a paper was read by Lieutenant-Colonel J. B. WILSON, R.A.M.C., on *The management of venereal disease at Woolwich*. After admitting the unreliability of statistics, he pointed out that in the past four years there had been a very marked decrease in the number of admissions for venereal diseases at Woolwich, amounting to 50 per cent. of the total in 1905, with an even greater reduction of 87 per cent. if the maximum year of 1902 were taken as the starting-point. He submitted that a considerable proportion of this reduction must be attributed to administrative methods. He detailed these shortly, the main point being the centralization of all venereal disease under one specially trained medical officer, with attempts to limit, as far as possible, the amount of paper work. The actual treatment adopted was that practised at Aix-la-Chapelle—namely, systematic inunction daily for forty days, Sundays excluded, the same underclothing being worn all the time, and careful attention being paid to the teeth and throat. The above formed the staple treatment of all syphilitic patients actually in hospital, but other methods were not, of course, neglected. Arsacetin and soamin had been tried, and, in the case of out-patients, injection. For gonorrhoea irrigation was employed, but did not, in Lieutenant-Colonel Wilson's opinion, do much to shorten the disease; he did not consider that on pathological grounds there was much to be said in support of this form of treatment. Both gonococcus vaccine and staphylococcus vaccine had been used. The former had not given satisfactory results, and it was too soon to speak regarding the latter. The author pointed out that it was a mistake to consider that gonorrhoea was a comparatively trivial disease compared with syphilis, and thought that a great amount of the improvement that had occurred at Woolwich was attributable to the fact that the serious nature of the former disease had been recognized, and its after-treatment systematized, as was universally the case with syphilis. He thought more might be done in the direction of teaching the soldier the

truth about the dangers of incontinence, and its possible results. Major C. E. POLLOCK criticized the use of inunction from the service point of view, on the ground of the length of time it was necessary to detain the man in hospital in comparison with that necessary for in treatment by injection. As regards gonorrhoea, he suggested that men should be compelled to report when they had incurred risk of infection, so that by clinical examination of the meatal mucus an early diagnosis might be facilitated. Major W. A. WARD agreed that the serum treatment of gonorrhoea had not been a success. He was strongly opposed to the practice of inunction in the army. He thought that in the case of men passed to the Reserve while undergoing a course of treatment for syphilis some steps should be taken to keep in touch with the case. Captain L. W. HARRISON referred to the value of the Wassermann treatment as an index of the necessity for further treatment. He thought more attention might be paid to the combination of mercury with arsenic in the form of arylarsonates. He considered that serum treatment was advantageous in the case of gonorrhoeal rheumatism. Captain BRANSBURY and Fleet Surgeon CLAYTON also took part in the discussion.

MEDICO-CHIRURGICAL SOCIETY OF GLASGOW.

At a meeting held on February 18th, Professor MUIR, President, in the chair, Mr. A. ERNEST MAYLARD described two cases of *Sarcoma of the stomach*. The following are notes of the cases:

(1) A man aged 63, operated on successfully in Victoria Infirmary in 1903 for stricture of the rectum; readmitted in 1909 for treatment of prolapse of rectum, much enfeebled, and died after operation. *Post-mortem* examination by Dr. John Anderson showed a large cystic tumour springing from the greater curvature of the stomach, with smooth external wall, unilocular, and filled with blood-stained fluid and soft tumour tissue, which microscopic examination proved to be a spindle-celled sarcoma. The gastric mucosa was healthy. (2) A woman aged 57. No symptoms whatever beyond uncomfortable increase of size of abdomen; tumour regarded as an ovarian cystoma; laparotomy; removal of tumour and pedicle, with excision of portion of stomach wall to which it was attached; recovery. Dr. Anderson reported on the tumour as a large unilocular cystic tumour with smooth external wall and filled with laminated clot. Microscopic examination of the cyst wall suggested a tumour of mesoblastic origin—a mesothelioma.

Dr. J. M. MUNRO KERR read notes of 5 cases of *Disease of the caecum and sigmoid simulating affections of the uterus and adnexa*, with which, as supposed gynaecological cases, he had been asked to deal. In three of these a correct diagnosis of the bowel condition was made by Dr. Kerr before operation; in the fourth case the bowel condition was suspected; in the last case it was not recognized till after the abdomen was opened.

(1) Carcinoma of the sigmoid which simulated an ovarian tumour; removal of sigmoid and rectum by combined abdominal and perineal operation; recovery. (2) Advanced malignant disease of rectum which resembled a fibromyoma of uterus; colotomy; recovery. (3) Chronic inflammation of appendix and caecum simulating fibromyoma of uterus; removal of caecum; recovery. (4) Tuberculous disease of caecum which simulated an ovarian tumour; lateral anastomosis; removal of caecum ten days later; recovery. (5) Cyst of left ovary with carcinoma of sigmoid, which at first presented features of extrauterine pregnancy; removal of ovarian cyst; subsequent resection of bowel; recovery.

Dr. J. S. MCKENDRICK gave a lantern demonstration illustrating the *Use of the polygraph in cardiac disease*. Slides were shown illustrating various forms of venous tracings in health and disease, the auricular as contrasted with the ventricular form of venous pulse, and the effects of digitalis on the failing heart. Tracings taken by Lewis by his electric cardiograph were also shown, and reference was made to experiments by Cushny and Lewis on the dog's heart showing that excitation at definite points of the cardiac musculature caused abnormal contractions similar to those met with in many cardiac arrhythmias.

NORTH OF ENGLAND OBSTETRICAL AND GYNAECOLOGICAL SOCIETY.

At a meeting held at Liverpool on February 18th, Dr. W. K. WALLS (Manchester), President, in the chair, Dr. J. E. GARNER (Preston) read notes of a case in which he had removed two large *Solid ovarian tumours* from

a woman of 28. She was suffering from abdominal pain and vomiting, and there was some loss of flesh. The abdomen contained much ascitic fluid but there were no adhesions. The pathologist thought the growths were endotheliomata rather than carcinomata, and probably of secondary origin. A month later a large quantity of ascitic fluid was removed, and a solid mass could then be felt above the umbilicus. This had not been noticed at the operation. Death occurred two months after the operation. Dr. J. H. WILLET (Liverpool) showed a uterus containing a *Necrotic submucous fibroid* in process of spontaneous expulsion removed from a multipara of 31, who for twelve months had had profuse menorrhagia, accompanied by labour-like hypogastric pain. At one time the passage of some solid pieces of tissue had suggested to her doctor the possibility that the uterus might contain a mole. But, on microscopical examination, the pieces proved to consist of necrotic muscular tissue. There was thick muco-purulent discharge; total abdominal hysterectomy was therefore performed. Dr. R. M. LITTLER (Southport) reported a case of traumatic *Rupture of a uterine fibroid*, with intraperitoneal haemorrhage. The patient, a spinster of 43, had noticed a gradual increase in the size of her abdomen for four or five years. Menstruation had always been regular though scanty, and, until the last three years, attended with severe pain. She had not consulted a doctor. One evening she tripped and fell heavily on the asphalt walk. She was seized at once with severe abdominal pain, but was able to walk home, a distance of a hundred yards. She felt very faint, vomited, and had an urgent desire to go to stool. Severe pain continued all night. Early next morning a doctor was summoned; he gave her morphine hypodermically, and sent her to the Southport Infirmary, where Dr. Littler, acting on a provisional diagnosis of ruptured ovarian cyst, at once opened the abdomen. It contained a large quantity of free blood—a pint at least. A large pedunculated subserous fibroid, presenting a lacerated wound 3 in. long on its anterior surface, was quickly removed. Recovery was uninterrupted. The tumour weighed 6½ lb. The laceration was superficial, but involved a large vein. Dr. J. E. GEMMELL (Liverpool) reported (1) a case of *Pregnancy complicated by acute intestinal obstruction*. The patient, when five months advanced in her first pregnancy, was seized with abdominal pain and repeated vomiting, which in forty-eight hours was faecal in character. The obstruction was found to be caused by a band as large as a Fallopian tube, which ran between the back of the uterus and the right broad ligament, and constricted the ileum some 6 in. from its lower end. This and some smaller adhesions were divided. The vermiform appendix was represented by a blunt stump, ½ in. in length, and free from adhesions. During childhood and adolescence the patient had had several attacks of obscure abdominal illness. Labour, which had commenced before the operation, terminated the same evening. Convalescence was uncomplicated. (2) A case of *Pregnancy at seven months complicated by appendicitis*. Spontaneous premature labour occurred, and the bowels, which had not been opened for seven days, acted normally next day. For three days the patient was much better, then pain recommenced, the temperature rose, and a week later a large swelling, extending from the right Poupert's ligament to the costal margin, was found. On exploration this was found to consist of a suppurating ovarian dermoid cyst below, and a large appendicular abscess above. A drainage tube was placed at each end of the wound. The patient made a good recovery. The following specimens were also shown:—Dr. A. CUFF (Sheffield): Ovarian cystic teratoma removed from a girl of 10. Dr. A. J. WALLACE (Liverpool): Three solid ovarian tumours. Dr. H. BRIGGS (Liverpool): A uterus, containing a large mushroom-shaped adenoma, removed from a patient of 73 years.

WE learn that a leper station and asylum are being established at Makogai in the Fiji Islands for the segregation of all lepers found in the islands.

A DEPARTMENT of experimental breeding has been established in the College of Agriculture of the University of Wisconsin. Dr. Leon J. Cole, who has been appointed professor, will conduct investigations on experimental breeding with special reference to the laws of heredity and the improvement of animal life.

Reviews.

ENGLISH POOR LAW POLICY.

MR. AND MRS. WEBB'S latest volume, *English Poor Law Policy*,¹ is practically in its earlier portion a history of English Poor Law from 1834 to 1907, showing the lines of evolution of Poor Law policy from the "principles of 1834" to the "principles of 1907," and dealing separately with all classes coming under the Poor Law authorities. This policy, we are told, is embodied in "a bewildering chaos of statutes and orders, circulars and minutes, general reports and official letters," numbering literally tens of thousands, which the authors have classified in order to deduce the principles underlying them for each period. We are told in the preface that the task was undertaken at the suggestion of the late Royal Commission, and formed the subject of a report circulated to the Commission in July, 1907, and it is interesting to note that many pages of the latter portion of the book appear verbatim in the Minority Report for Scotland.

Dealing with the historical portion first, analysis of the earlier documents shows three main principles underlying the report of 1834:

1. *The principle of "national uniformity"*—that is, of identity of treatment of each class of the destitute all over the kingdom. This no longer exists to-day, except for vagrants.

2. *The principle of "less eligibility"*—that is, that the condition of the pauper should be "less eligible" than that of the lowest grade of independent labourer.

3. *"The workhouse system"*—that is, that relief should only be given in the workhouse.

The two latter principles are generally regarded as the root-principles of the reforms of 1834, though in the first instance they were only intended to apply to the able-bodied. During the last seventy years, however, three other principles, which were not known, or rather not considered relevant to the relief of the destitute in 1834, have, the authors consider, come to the front. These three "principles of 1907" are stated as follows:

1. *The principle of "curative treatment,"* which is said to be the direct opposite of the principle of less eligibility, and might even be called the principle of "greater eligibility." This is well seen in the institutional treatment of the sick, and to a much less degree in outdoor medical relief. It also appears in the physical training, mental education, and prolonged supervision of pauper children, the grant of more adequate outdoor relief of the deserving aged, and farm colonies for the able-bodied.

2. *The principle of "universal provision"*—that is, the provision by the State of particular services for all who will accept them, quite irrespective of destitution. This is seen most in the educational and sanitary work of municipal authorities, the provision of municipal hospitals open to all, and old-age pensions for all above a certain age having less than a certain income, all which provisions directly impinge on Poor Law policy.

3. *The principle of "compulsion"*—that is, the treatment of individuals in the way the community deems best, whether the individual likes it or not.

In contrasting the principles of 1834 with those of 1907, the authors say that the former embody the doctrine of *laissez faire*, while those of 1907 embody the doctrine of the mutual obligation between the individual and the community. It is admitted that the principles of 1907 have not been consciously selected in many cases, and that they are not all of universal application; for instance, the aged are not susceptible of "curative treatment," only a few sections such as lunatics, patients suffering from infectious disease, and the incorrigible loafers need "compulsion," whilst in our present civilization "universal provision" will be limited to particular services such as education and sanitation in their widest interpretation. Upon this the following observations are made:

It is here that the Poor Law Commission of 1905-9 will have its greatest effect. Its criticisms and recommendations will be operative, whatever may be the legislative outcome, in deciding to what extent and in what particular directions there will be an increasing application of the principle of curative treatment,

¹*English Poor Law Policy*. By Sidney and Beatrice Webb. London: Longmans, Green and Co. 1910. (Med. 8vo, pp. 395, with Appendices. 7s. 6d.)