NOTES ON TWO UNUSUAL CASES OF INFANTILE SCURVY.

BY ERIC PRITCHARD, M.A., M.D. OXON., M.R.C.P. LOND.,
SENIOR ASSISTANT PHYSICIAN TO THE QUEEN'S HOSPITAL FOR CHILDREN.

ON March 27th, 1912, I saw, in consultation with Dr. E. C. Gimson, of Witham, Essex, a female baby aged 9 months. The infant had made satisfactory progress until 14 days previously, when a slight feverish attack supervened, which at the time was ascribed to the cutting of a tooth. The condition, however, did not improve, and the child became obviously ill, with a running temperature ranging between 100° and 101° F., quick breathing, and a rapid pulse. The striking feature of the case, however, was the development of a generalised œdema, which gave the infant a very puffy and bloated appearance; in the words of the mother, the child "grew larger and larger every day." This condition naturally gave rise to a suspicion of some involvement of the kidney, but the urine, which had been collected and examined before my arrival, showed no trace of albumin or other abnormality.

When I saw the infant on March 27th she was evidently in a serious condition; the respiration rate was about 90, the temperature 101°, and the whole body enormously swollen and œdematous in appearance. There was little or no tenderness of the limbs, only slight sponginess of the gums, and no indications of hæmorrhage from the kidneys, bowels, or other organ in the body, and beyond rapidity of action no abnormality could be detected in the lungs or heart. The reflexes were slightly sluggish, and the infant lay in a distinctly lethargic condition. From a review of the method of feeding I felt convinced that this was an abnormal case of scorbutus, and so subsequent events clearly proved, for although on the following day the infant had hæmorrhage from the bowel, subsidence of the œdema and recovery from the other symptoms took place almost miraculously under antiscorbutic treatment.

The interest of this case lies in the extensive development of the œdema from which no part of the body seemed exempt. When I saw her the infant had a pallid, waxy appearance, which I was told was in striking contrast to the healthy, pink colour of the skin of some days before. Another peculiarity of the œdema was that, although it looked as if it would easily pit on pressure, it was practically impossible to obtain a permanent indentation with the fingers, no matter how deeply they were inserted into the skin. I have several times noticed this same characteristic with œdema in scurvy, but I have never seen so extensive a case before, nor one in which the absence of pitting was so marked.

The second case was referred to me by Mr. R. G. Dainty, resident medical officer at the St. Marylebone General Dispensary. The history of the case was as follows. On March 30th of this year an infant, aged 10 months, fell from a mail cart on to a mat on the floor; it did not appear at the time to be seriously injured, but the same evening a swelling gradually appeared on the side of the head on which it had fallen. On the following day the infant was examined by Mr. Dainty, who at the time did not detect any serious symptoms beyond the swelling on the head which had now attained to considerable proportions. When, however, a few days later the swelling had increased rather than decreased in size, and the child seemed lethargic and disinclined to move, Mr. Dainty decided to ask my opinion as to whether I thought that the hæmatoma of the scalp could in any way be associated with intracranial pressure.

On examination I could find no evidence of cerebral pressure, but on inquiry I discovered that the infant had not been well for some days before the accident. The child had been lethargic, disinclined to move, had had no appetite, and seemed generally indisposed. The method of feeding again was not without its significance. I found that there was general tenderness over all the limbs, and evidently strong aversion to being moved or otherwise disturbed. The gums were spongy and of a purple colour. I therefore prescribed an antiscorbutic diet of orange-juice, raw meat-juice, egg water, and milk, and strongly advised against aspiration or other interference with the hæmatoma of the scalp, which by the time of my examination had assumed an

enormous size. The general condition of the infant rapidly improved under this treatment, and at the end of 10 days it had practically returned to normal health and showed an increase in weight of over 18 oz.

Harley-street, W.

NOTE OF A CASE OF URETHRAL CALCULUS OF UNUSUALLY LARGE SIZE.

BY E. A. WALKER, M.B. EDIN., F.R.C.S. EDIN.,
CAPTAIN, I.M.S.; CIVIL SURGEON, MEIKTILA, BURMA.

A BURMESE man, aged 28, was admitted to the Meiktila Civil Hospital on Feb. 23rd, 1913, by my assistant surgeon, complaining of inability to pass urine freely; duration of illness three months.

The patient was in bad condition, very thin, covered with itch, and his clothes were soaked with decomposed urine. On examination the bladder was found to be dilated to about 5 inches above the pubes. On passing a metal catheter, this was arrested about the membranous part of the urethra, and a distinct grating sensation was felt as if the instrument had impinged on a stone. This was confirmed by a rectal examination, when a densely hard lump was felt at the anterior part of the prostate and running forward into the perineum. Its exact boundaries could not be made out, but it was realised that the calculus was of large size. The patient's history threw little light on the condition. He insisted that the difficulty in micturition had only been noticed for the last three months, and that before that he was perfectly well except for an attack of gonorrhœa. There was no history of renal colic, nor of any previous passage of calculi by the urethra.

Owing to my absence in the district the operation was not performed until March 2nd. The patient was anæsthetised with chloroform and placed in the lithotomy position. A median perineal incision 2 inches long was made from a point $\frac{1}{2}$ inch in front of the anus. This had subsequently to be enlarged anteriorly almost to the base of the scrotum. The incision was carried down to a staff in the urethra, which was opened just behind the triangular ligament, and the calculus immediately came into view. To expose it properly the urethra had to be slit up for a distance of about 3 inches, dividing parts of the prostatic, membranous, and spongy portions. There was fairly free hæmorrhage from the cut corpus spongiosum at this stage. The

calculus was now found to be lying free in a smooth-walled sac apparently formed by the dilated urethra. It was bathed in foul-smelling, ammoniacal urine and a small quantity of pus. The question of its removal now became acute; unfortunately, we had no lithotrite available, as its use had not been anticipated, and the nearest instrument is kept at Myingyan, the next district headquarters. However, by getting one finger round the calculus and manœuvring it so that its smallest diameter was at right angles to the wound, and by the expenditure of a considerable amount of force, it was eventually delivered. Its removal caused some bruising and tearing of tissue and free hæmorrhage, and the escape of a large quantity of urine. Hæmorrhage was arrested by ligatures and extensive plugging.

The patient stood the operation well, and there was practically no shock. On the third day a catheter was tied in, but as soon as the patient was left alone he removed it. This he did on two subsequent occasions, so the attempt was abandoned. At the time of writing (March 21st) a fair quantity of urine comes from the meatus, and the very large cavity in the perineum is gradually filling up. The patient's general condition has improved markedly.

As regards the calculus the photograph (see figure) shows it in the hand of a Burmese nurse, which gives a good idea of its size. Its exact dimensions were—length $2\frac{1}{2}$ in., breadth 1.7-1.6 in., and depth 1.1-1.6 in. It weighed 2 oz. 5 dr. when dry and was composed of urates with a coating of phosphates about $\frac{1}{4}$ in. thick.

Soon after operating on this case I received THE LANCET of Feb. 22nd containing a note on an interesting case of urethral calculus by Captain T. C. Rutherford of my service. I have reported my case, as it was one of strictly urethral calculus; no part of it reached the interior of the bladder, and for a strictly urethral specimen it is undoubtedly a large one. I think that the method of crushing *in situ* and piecemeal removal would have been a better one and would have resulted in less damage to the tissues had the lithotrite been available, but as it is the patient is making a good recovery. No other calculi were detected in the bladder on passing the sound.

Meiktila, Burma.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

VACCINE TREATMENT OF MIXED INFECTION IN PULMONARY TUBERCULOSIS.

BY BERNARD HUDSON, M.D. CANTAB., M.R.C.P. LOND.,
VISITING PHYSICIAN, QUEEN ALEXANDRA SANATORIUM,
DAVOS-PLATZ.

THE following report on three cases of undoubted mixed infection in pulmonary tuberculosis which were greatly benefited by vaccine treatment may prove of interest to readers of THE LANCET.

CASE 1.—A girl, aged 16. Duration of disease two years. Physical signs: scattered râles over the upper lobe of the left lung. Disease quiescent, no cough or sputum, except very occasionally, and temperature normal. During a period extending over a year there were at more or less regular intervals of one month attacks which can only be compared to influenza—that is to say, the temperature rose to 100° or 101° F., accompanied by malaise, aching pains in the back and limbs, and shivering. These attacks lasted about three or four days and then passed off, but left the patient weak and pulled down, and, generally speaking, kept her back. Many different vaccines were tried, both stock preparations and vaccines prepared from the sputum when there was any, which was only very occasionally. Among the organisms used were the B. Friedländer, B. septus, streptococcus, staphylococcus, pneumococcus, and M. catarrhalis, but with absolutely no effect. The patient also had a prolonged course of tuberculin injections. Finally, an organism resembling the M. catarrhalis was isolated from the nasal and pharyngeal secretions and used as a vaccine.

Since the injections were given the patient has been free from the attacks and is doing very well, putting on weight and improving in general health.

CASE 2.—A woman, aged 35. Duration of disease one year approximately. Physical signs: infiltration of the left upper lobe, only slight and not easy to detect. There was also a considerable amount of general bronchial catarrh. The disease was apparently arrested, the patient as a rule being very well; the temperature was normal and the digestion good, but there was a good deal of sputum (20 c.c. in the 24 hours), which contained a moderate number of tubercle bacilli. For a period of three months she had regular very acute attacks of fever, the temperature usually rising to about 102° F., and in one instance even reaching 104.5° . These attacks occurred at intervals of three weeks, and were accompanied by severe headache, malaise, and shivering. (Malaria was excluded.) The cough and sputum were not increased during the attacks, and there was no pain in the side or elsewhere. These febrile explosions only lasted two days, the temperature then falling as abruptly as it had risen, the defervescence being accompanied by copious sweating. A vaccine was prepared from the sputum, and contained M. catarrhalis and B. Friedländer in equal quantities.

Since the patient has been under treatment with this vaccine the attacks have become less severe, occurring at longer and longer intervals. Her general condition is much

improved, the sputum being less in quantity, and I have every hope that she will soon be quite free from these periodical febrile attacks which have been the means of keeping her back for so long.

CASE 3.—A man, aged 37. Physical signs: extensive disease of the left lung, with cavitation of the upper lobe. Activity arrested and patient very robust and with a normal temperature. In December, 1911, he began to have a raised temperature and increase in the amount of sputum, and shortly after this he had a hæmorrhage of about half a pint. This stopped in two or three days' time, but was followed after an interval of 14 days by another one of about the same amount. The bleeding stopped, but again occurred in 14 days, and so on till the patient had had in all eight hæmorrhages, with an interval of 14 days approximately between each one. During all this time the temperature was raised, being 100° to 101° F. in the afternoons. The sputum was trebled in quantity, having increased from 15 to 45 c.c. in the 24 hours; also the sputum was very offensive. After the patient had had eight hæmorrhages the sputum was cultivated and a short-chained streptococcus isolated, from which a vaccine was prepared and injections begun. He had, it is true, two more hæmorrhages, but the temperature gradually came down and the sputum diminished in quantity and became much less purulent in character. He was up and about again by the middle of March, and regained quickly his former health and condition.

I consider that this man had his cavity infected by a streptococcus, and that this was the whole cause of the trouble, raised temperature, increased, offensive sputum, and hæmorrhages, these latter being due in the first instance to the ulcerating action of the secondary organism (in this case a streptococcus) on a vessel, and the subsequent ones to digestion of the clot, by the action of the same organism, which required about 14 days to be accomplished.

Davos-Platz.

NOTES ON A CASE OF RHEUMATOID ARTHRITIS TREATED WITH SUBCUTANEOUS INJECTIONS OF RHEUMATISM PHYLACOGEN.

BY FREDERICK PORTER, M.B., C.M. EDIN.

PHYLACOGENS are "sterile aqueous solutions of metabolic substances generated by bacteria grown in special artificial media." Rheumatism phylacogen is made from a large variety of pathogenic bacteria.

The obscurity of the etiology of rheumatoid arthritis and the results of its treatment form my excuse for publishing the following notes. I believe that the result obtained is sufficient encouragement to pursue the treatment in other cases, and also it may throw some light on the etiology of this disease.

A female aged 58 years, married, had been bedridden for the past four years. The disease started seven years ago with pain and swelling over the right knee, and then spread to other joints, in every way typical of rheumatoid arthritis. She suffered from acute febrile attacks every six or eight weeks. She had also—which I believe to be important—an offensive yellow vaginal discharge slightly tinged with blood. The discharge contained staphylococci and bacilli coli. I gave in all ten injections of phylacogen. I gave $2\frac{1}{2}$ c.c. for four days in succession and on the fifth day I gave 5 c.c. As there was a marked reaction after the last dose, the temperature rising to 103.4° F., I waited for four days and then I repeated the procedure. After the first three doses of $2\frac{1}{2}$ c.c. the reaction was slight, the temperature on the first occasion rising to 100.2° with a slight rigor and a pulse-rate of 110, but these symptoms quickly subsided. On subsequent doses the reaction was less marked, the temperature never rising above 100° , but the patient felt chilly. The patient felt benefit after the third injection in relief of pain and she informed me that she had not slept so well for months. The vaginal discharge completely disappeared and now, six weeks after the last injection, she is still free from pain, and she can be moved about without any discomfort.

This patient had been treated with every well-known remedy, and her diet was carefully regulated. She had undergone a prolonged course of calcium lactate without any benefit. Although the time which has elapsed—under two months—is short in which to draw any conclusion as to the future history of this case, the general benefit this patient received was so marked that it will encourage me to give this method of treatment further trial.

Edinburgh.