usually temporary in these cases. There is no history of any acute infective disease in this case and the duration of cardiac failure present is out of proportion to the damage likely to be done during the course of an acute infection, in which the failure is likely to be acute, and may suddenly terminate fatally.

(*d*) Arteriosclerosis when affecting the branches of the coronary artery may bring about the condition of heart block. The young age, low blood pressure, and absence of any thickening of arteries negative the possibility of this condition existing in the present case.

Treatment

(1) Absolute rest in bed.
(2) Insulin 10 units twice daily subcutaneously after meals followed by administration of 2 *chittaks* of sugar for one month.
(3) Atropin sulphate 1/100 grain—twice daily—was tried but no alteration in the pulse rate took place.
(4) Tincture digitalis 10 minims with 15 grains of potassium iodide—three times daily—was tried for a fortnight without any effect.

The patient left the ward with a slow constant pulse rate of 36 per minute. The symptoms of effort syndrome dyspnœa, palpitation, fatigue and præcordial distress had disappeared.

I am very much indebted to Colonel G. T. Burke, M.D., F.R.C.P., I.M.S., Physician to King George's Hospital and Professor of Medicine, University of Lucknow, for permission to publish this case.

ACUTE PSOAS ABSCESS

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A COLLECTION of pus in and around the psoas major muscle is generally chronic in nature and secondary to tuberculous disease of the spine. However, sometimes it is of an acute type. Such a case is seldom diagnosed correctly, not because the condition is rare or obscure but because the frequency of its occurrence is not appreciated. Recently Sworn (1933) has described three cases and quoted more from the literature. Baer, Bennett and Nichlas (1923) discuss forty-two cases of psoas abscess due to causes other than tuberculous disease. The following case, recently under my care, illustrates the usual features of this condition:

K., a boy aged 9 years, was referred to me as a case of tuberculous lymphadenitis of the groin. The history was that on 26th January, 1934, he got up at night to pass water and during micturition felt severe pain in the left loin, shooting down the left thigh and to the root of the penis. The pain persisted for a few hours after which it became easier. The same day he developed a fever of 101° which remained continuous for three or four days and then became suppurative in type. Along with this, the boy could not straighten his left leg. When first seen by me on 16th February, the boy was acutely ill, wasted, had a coated and dirty tongue, and a temperature of 102°F. The left thigh was kept flexed to a right angle and attempts to straighten it passively were strongly resisted and very painful. The abdomen was rigid, the rigidity being more marked on the left side. Careful palpation showed a sausage-shaped swelling in the left iliac fossa, with its long axis parallel to the inguinal ligament. The swelling was hot, tender and browny with a suggestion of softness in the centre. Careful examination failed to reveal evidence of spinal disease. The movements of the hip joint except extension were quite painless and free. Total leucocyte count was 18,000 per cubic millimetre. *X*-ray showed no bony lesion of the spine, ilium or hip joint. No other septic foci were discoverable. The urine showed no abnormality.

On 17th February, the swelling in the iliac fossa was explored with a needle and syringe and a few drops of thick pus and blood withdrawn which showed staphylococci and pus cells. On 18th February, the abscess was opened through an incision above and parallel to the inguinal ligament. It was extraperitoneal and was tracking down from near the lower pole of the left kidney. Counter drainage was established through a tube in the loin and the wound closed.

Subsequent progress was uneventful and full extension of the hip joint was regained in a month's time.

Discussion

Ætiology.—Acute psoas abscess may be primary or secondary. The secondary form may be due to a perinephritic abscess which tracks downwards along the psoas (this is favoured by the arrangement of Zuckerkandl's fascia) or an empyema which has burst below the 12th rib. It may follow acute osteomyelitis of the ilium or lumbar vertebra. It may be secondary to an appendix abscess which has burst extraperitoneally. Sometimes it follows suppuration of the retroperitoneal lymph glands particularly those along the common and external iliac arteries. The primary form is usually pyæmic in origin. In favour of this view are: the patient is often very ill previously; the onset of the abscess is quite abrupt; there may be other abscesses; the symptoms often subside quite rapidly and the absence of lesions to which the abscess is secondary: further the abscess is confined to the sheath of the psoas.

Diagnosis is quite easy if the possibility of this condition is remembered. The patient has a septic type of fever and complains of pain down the leg on the affected side or referred to the root of the scrotum. The characteristic sign is flexion of the hip which is quite marked and is more than can be accounted for by mere spasm of the psoas. The presence of a sausage-shaped swelling is pathognomonic. There is leucocytosis. Careful examination aided by radiography will eliminate bone disease.

Treatment.—Aspiration should be done first and if the examination of the pus suggests pyococcal origin, drainage should be established. The incision should be over the most prominent part of the swelling; but if there is no local swelling, an incision parallel to and two inches above the outer third of the inguinal ligament is the best. Great care should be exercised not to open the peritoneum. Counter opening posteriorly may be necessary. All loculi should be gently broken down. If the contraction of the psoas does not begin to disappear in a few days

after operation, weight extension will be necessary. Prognosis is usually very good.

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SURGERY OF THE SYMPATHETIC

By V. L. SURYAVANSHI, M.S.
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There are few diseases requiring operations on the sympathetic nervous system and, even in the presence of indications, very few operations are being performed in this country, partly owing to the fact that some of these are rather difficult, and partly to the uncertainty of the results. The following notes will, it is hoped, interest readers :

T. R., a Hindu female, about thirty-five years of age, was admitted into the Sassoon hospital, Poona, on the 29th March, 1932, for an ulcer on the right foot (under the care of another surgeon). She used to smoke much and lived on a mixed diet. Since the age of eleven she had felt alternate coldness and burning in her hands and feet. This was also accompanied by pain. The right foot later on showed signs of gangrene and was amputated at the site of election on the 1st November. The pain and other symptoms were becoming worse day by day and she had to be given morphia. She was kept in the infirmary as an invalid.

I was asked to see her in September 1933: I found her to be extremely emaciated and unable to leave her bed. She had gangrene of the left foot and had already lost four toes; there were deep ulcerations on the dorsum of the foot and black patches of necrosis on the leg up to the knee. The ulcers were very painful and she could not tolerate the weight of a blanket on the foot. The pulse in the dorsalis pedis artery could be felt only at intervals. The radial pulse on the right side could not be felt. The hands were cold. I diagnosed the condition as Raynaud's disease and decided to perform the operation of lumbar sympathectomy on both sides. She consented to this and was accordingly operated on; recovery was uneventful. The ulcers were dressed with zinc and boric ointment containing some percain and the legs covered with plenty of wool and flannel bandages. In about two months time I was surprised to find that all the ulcers had completely healed, the necrosed skin had fallen off and was replaced by new skin and her symptoms in the legs were ameliorated. Her general condition improved considerably by not being troubled with pain and sleepless nights. Encouraged by the result, I proposed to her that she underwent 'cervical sympathectomy' on the right side as the symptoms in the arm on that side were worse. The patient, satisfied with the improvement, readily consented to the operation. Under local anæsthesia, I exposed the cervical sympathetic chain by the anterior route and removed the inferior cervical ganglion and its communication with the first thoracic. I was extremely astonished to note that the pulse in the right radius became perceptible and got this fact confirmed by my colleagues. The symptoms in that arm abated. Although at first unable to bear the weight of clothes on her foot she is now able to move about on crutches resting the left leg on the ground.

If this case had been treated as above in the beginning, I think she would have obtained greater relief.

The surgeon who had amputated her right leg thought it to be a case of thrombo-angiitis obliterans, on this point however I do not agree with him.

A CASE OF HYDATID CYST OF THE LUNG*

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On the 26th April of this year a Hindu boy, fourteen years of age, was brought by his parents for consultation to the civil hospital, Giddarbaha, district Ferozepore, from Bhuchu, a market in the same district. His general ill health was attributed chiefly to short bouts of coughing, a feeling of heaviness in the left chest and a long irregular fever for the previous six months. The boy was examined in routine and it was found that the left side of the chest had restricted movements, gave a dull, solid note on percussion, was airless with complete loss of vesicular murmur and vocal resonance but without any obliteration or bulging of the interspaces, right up to the middle of the scapula behind.

A provisional diagnosis of effusion in the chest was made, and the relatives were informed about the boy's condition and advised to have the chest aspirated before any other line of treatment was adopted. Having obtained their consent we made preparations to aspirate in the ninth interspace at the scapular line. We succeeded with a good deal of difficulty in inserting the trocar and, contrary to expectation, the fluid that came away was unusually clear. The fluid actually began to trickle through the cannula before the trocar was removed.

As soon as the fluid began to collect in the bottle, the boy started coughing, developed dyspnœa and expectorated a clear, viscid, frothy mucus. When about four ounces of fluid had collected in the bottle, the flow suddenly stopped in spite of our efforts to move the cannula in various directions. The cough increased, became incessant and the boy seemed to be in a condition of anaphylactic shock.

It suddenly struck us at this point that it was a case of hydatid cyst of the lung and the question of an immediate radical operation had to be considered. The guardians, on being informed of his grave condition, would not however consent to an operation in spite of our advice.

The child, therefore, was made comfortable in the bed, as nothing could be done except to watch and wait.

The fluid collected was subjected to laboratory tests, both chemical and microscopical. It was of very low specific gravity, non-albuminous and contained traces of sugar. A film from the deposit was prepared and examined under the high power of the microscope. Numerous hooklets were observed which confirmed the case to be one of hydatid cyst of the lung.

The child although in bed was now in agony because of severe cough, dyspnœa, laboured breathing and continually increasing surgical emphysema which had reached from the thorax to the neck and cheeks in about three hours.

The relatives were again made to realize the great necessity for immediate operation to save the child and fortunately gave their consent.

The child was once again put on the table for operation. General anæsthesia was out of the question as the respiratory system was already sufficiently embarrassed. Spinal anæsthesia could not be resorted

* Rearranged by Editor.