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elbow, but some weak flexion was possible at the left elbow. Dorsi-flexion of both wrists was very weak. There was marked wasting of both deltoid and biceps muscles and of the intrinsic muscles of both hands. In contrast to this weakness of flexion, extension at the elbows was quite strong. In the lower limbs the power was good in all muscle groups, but there was some sensory ataxia, as shown by the heel-to-knee test, especially on the left. The triceps jerk was active on both sides, but the biceps and supinator jerks were absent. The abdominal reflexes were very active. The knee jerks were present on both sides, but the ankle jerks were absent. Plantar response was indeterminate. There was no loss of appreciation of pin-prick or light touch, and some hyperaesthesia was present in the lower limbs. The sense of position was normal and Romberg's sign was positive. Sensibility to deep pain was much diminished, but the vibration sense was normal. There was no astereognosis. At first some difficulty was experienced in micturition, but this soon disappeared.

Investigations.—The cerebrospinal fluid was normal in appearance, with no increased tension; cell count, 2 per c.mm.; albumin, 70 mg. per 100 ml.; globulin, 10 mg. per 100 ml.; colloidal benzoin reaction, 0000022200000000; Kahn test and Wassermann reactions, negative.

Radiograph showing bony changes

Medical Memoranda

A Case of Charcot's Disease of the Cervical Spine

The following case of Charcot's joint disease of the cervical spine was recently under treatment at the C.M.S. Hospital, Old Cairo.

CASE HISTORY

The patient, an Egyptian, first came to the hospital in 1944 complaining of difficulty in walking. A Kahn test of cerebrospinal fluid and blood was negative, but the C.S.F. contained 70 mg. of albumin per 100 ml. and 76 cells per c.mm., and clinically the case appeared to be one of tabes dorsalis, a rare disease in Egypt. This diagnosis was confirmed by Colonel Spillane, neurological specialist, who kindly examined him.

During the next year the patient had almost continuous treatment with N.A.B. and bismuth and improved considerably until he became able to walk two to three miles without undue fatigue. He remained well until April, 1947, when he began to feel "pins and needles" in the right arm and noticed some wasting of the muscles of his right hand; there was also clicking in the neck on forward and backward movement of the head. He did not suffer any serious disability, however, and continued his work as a clerk until October, 1947, when he quite suddenly had an attack of retention of urine, which had to be relieved by catheter. From this time onwards he had difficulty in micturition on and off, and gradual loss of power in the right arm and hand until Feb. 6, 1948, when he suddenly became unable to raise the arms at the shoulders or to flex them at the elbows, and there was a burning pain in the region of the right shoulder, made worse by bending the head backwards. He had also noticed girdle pains.

On Feb. 13 he was admitted to hospital. On examination he was seen to be a thin, ill-looking man, aged 55. He was alert mentally, he answered questions intelligently, and his speech was normal. He gave a history of having had syphilis at the age of 18, and stated that a Kahn test on the blood serum, done a few weeks previously, had proved mildly positive. He held his head somewhat flexed. Flexion and extension of the neck were fairly free, but there was marked clicking on bending the head backwards, and this movement caused a severe pain to radiate down the right arm. Examination revealed the following signs:

A left internal squint, stated by the patient to have been present since he was 18 years of age. Very small regular pupils, inactive to light and reacting sluggishly to accommodation. The cranial nerves, apart from the 6th, were normal. There was complete loss of power of abduction of the arms at the shoulders and of flexion at the right

The Kahn blood reaction was also negative. Radiographs showed marked bony changes (see fig.). I am indebted to Dr. Nessem Abu Saif, professor of radiology at Kasr-el-Aini Hospital, for the following report: "There is deformity, partial collapse, and backward subluxation of C3, 4, and 5, with bony condensation of an ivory appearance and irregular new bone formation, especially on the anterior aspects of these vertebrae. The intervertebral disks are preserved. This bizarre deformity is typical of Charcot's joint disease."

Treatment.—The patient was put on antisyphilitic treatment and received 500,000 units of penicillin daily for 10 days; 10 injections of N.A.B., given twice weekly, the dose rising from 0.15 g. to 0.6 g., then 0.6 g. weekly for 10 weeks; and "bismostab" 1 ml. weekly for the last five weeks. During the whole period he was taking by mouth liq. hyd. perchlor. $\frac{1}{4}$ dr. (1.75 ml.) and pot. iod. 10 gr. (0.65 g.) three times a day.

Under this treatment there has been definite clinical improvement. Micturition is normal. He can walk better and there has been a return of power to a limited extent of flexion at the elbow. He can now bring his hand to his mouth. The shoulder muscles, however, are still very weak, and the small muscles of the hand on both sides are very wasted. The sensation of pain in the right shoulder, of which he complained, is much less, but is felt occasionally. It is considered unlikely that any more improvement can be expected.

The interest of the case lies in the fact, first, that while the clinical picture is atypical, and there are only very mild changes in the C.S.F. to indicate an old syphilitic infection, the changes in the cervical spine are typical of Charcot's disease of the spine; secondly, that the cervical spine is very rarely affected by tabetic arthropathy, the lumbar region being the commonest site.

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The Ministry of Health has issued a new list of treatment centres for venereal diseases. It covers the United Kingdom and Eire, and gives the names of the centres, the towns where they are situated, and the times when patients are seen.