A CASE OF PSAMMOMA AFFECTING THE SPINAL CORD AND MIDBRAIN.

By Captain A. G. HARSANT.
Royal Army Medical Corps.

Lance-Corporal W., Royal Irish Rifles, was admitted to hospital on December 31, 1920; he had a good family history and no previous history of venereal disease or other serious illness. He complained of a steadily increasing difficulty in keeping up with his platoon on the march (four months): of occasional slight difficulty in commencing micturition (three months): of dimness of vision (one month): and of loss of control over his legs, with unsteadiness on first standing up (two weeks). On admission his general nutrition was good.

He had considerable loss of co-ordination, and a spastic paresis of the lower limbs; marked loss of sensation below the seventh thoracic segment; lateral nystagmus to right and left, and dimness of vision with early optic atrophy.

Gait unsteady and spastic; Romberg's sign marked; legs not wasted; knee-jerks exaggerated; Babinski sign present, right and left; abdominal reflexes present. Loss of painful sensation to pinprick below a line round the waist at the level of the base of the ensiform cartilage; loss to cotton wool and tactile discrimination over an area less extensively by about one to two inches. Marked ataxia and loss of passive position in the lower limbs. There was no zone of hyperæsthesia. Movement, reflexes, and sensation in the arms normal. Pupils normal. Memory and speech normal.

A radiograph of the spinal column did not show any abnormality. Lumbar puncture, without and with an anæsthetic, was dry. Wassermann reaction negative (twice).

For forty-eight hours following the anæsthetic and lumbar puncture, he was depressed, irrational and restless; but gradually returned to his previous contented state of mind.

Three weeks after admission he complained that his vision was suddenly much worse. He could only distinguish light and darkness; all ocular movements were normal. Two hours later he commenced to cry, saying that he could not feel anything: this was followed by loss of consciousness, general rigidity and spasm in the right arm. He regained consciousness in a few minutes but remained very emotional and restless. His legs were now completely paralysed and extremely spastic, any slight stimulation of the foot or leg caused strong flexion of thigh and leg. Abdominal reflexes were lost. Any pinprick above the seventh thoracic segment gave rise to a strong emotional response, accompanied by diffuse protective movements of his arms.

Retention of urine was absolute, and his fundi showed definite optic atrophy.

Four weeks after admission there was slight paresis of the right side of his face.

After eight weeks.—An attack of loss of consciousness, with general rigidity, followed by dilirium and restlessness for forty-eight hours.

In the ninth week.—A similar attack. There was now some slight astereognosis in the hands. He was quite blind.

Progressive deterioration, emaciation and stupor ended in death six months after admission.

Treatment.—Five intravenous injections of kharsivan led to a merely transient improvement in his mental condition and vesical symptoms.

He was catheterized twice a day for five months after the onset of retention.

Post-mortem examination.—There was pyonephrosis and a small perinephric abscess on both sides.

The pituitary fossa, of normal size and shape, was occupied by an encapsuled growth spreading round the optic chiasma, and on to the inferior aspect of the frontal lobes.

On the posterior aspect of the spinal cord was a growth extending the whole length of the spinal column, springing apparently from the arachnoid mater. The growth was semilunar on section, and compressed but did not invade the cord substance. The growth closely invested the cauda equina, and so compressed the lumbar cord as to render it almost diffluent; but it diminished in thickness in the thoracic and cervical regions.

The meninges around the medulla were thickened, apparently by a tissue similar to that of the growth of the cord.

A section of the growth on the spinal cord was very kindly examined by Lieutenant-Colonel H. Marrian Perry, R.A.M.C., Professor of Pathology, Royal Army Medical College, who submitted the following report:—

"Macroscopic examination of the section showed encapsulation of the spinal cord on its dorsal and lateral aspects by a new formation of tissue.

"Microscopically, this new formation consisted of a somewhat fine connective tissue network which was very vascular and contained many rounded bodies which were concentrically laminated; some of these bodies showed evidence of calcification. In many areas the capillaries, with which the growth was abundantly supplied, had become occluded by proliferated endothelial cells. In its histological structure the growth conformed to a *psammoma*.

"Viewed from the standpoint of an embryological basis this variety of neoplasm is regarded as a lepidoma, i.e., a new growth originating in lepidic or lining tissue. The tissue of origin in the case of the psammomata is the endothelial lining of the smaller capillaries, and, therefore, this form of neoplasm is classified as an endothelial new growth.

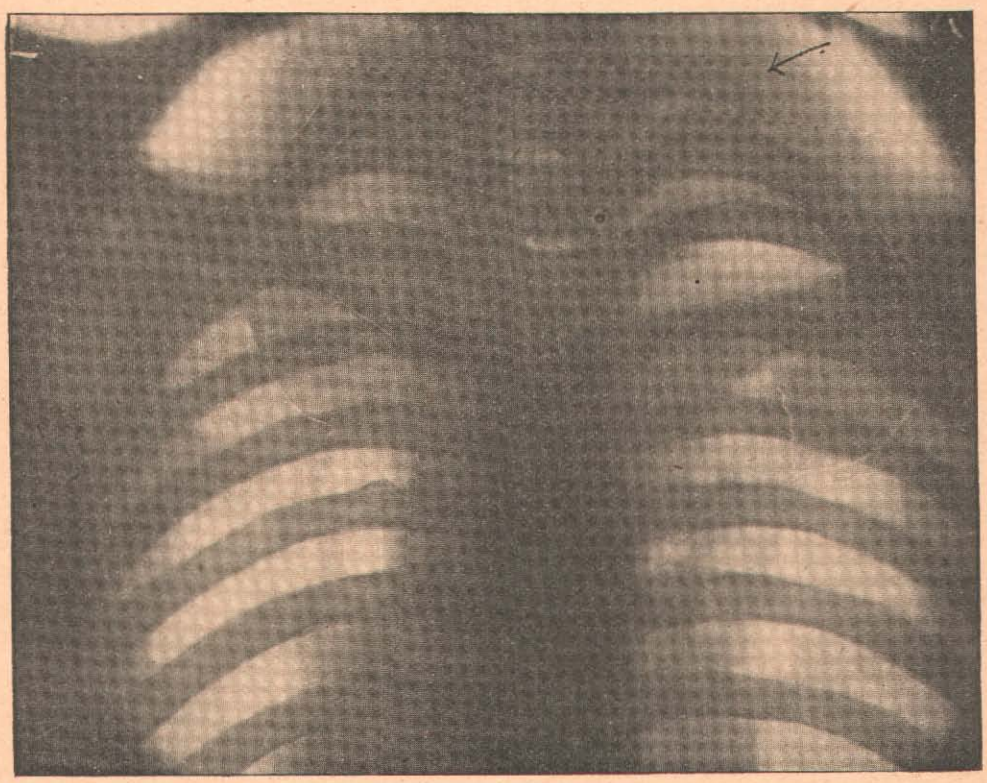
"New growths of this nature, in addition to their occurrence in connexion

with the cerebral and spinal membranes, also may originate from the pleura and peritoneum.

"The rate of growth of these neoplasms is usually slow and, when arising from the spinal membranes, the duration of the case depends on the regional situation of the neoplasm, and the extent to which pressure is produced."

ANOTHER INTERESTING CASE FROM AN OUT-STATION.

By Major J. H. DOUGLAS, O.B.E., M.C.
Royal Army Medical Corps.



X-ray photograph of Pte. H.

On my recall from leave I found attending the morning sick parade, a recruit, Pte. H., suffering from right torticollis.

I treated this case for rheumatic torticollis for a few days, but as it did not clear up with salicylates and iodates, I examined him more thoroughly and found that there was a slight kyphosis in the cervical-dorsal region, with a slight lateral curvature towards the right.