CASE REPORT AND TECHNICAL NOTES
EPENDYMOMA OF SPINAL CORD: SUBTOTAL INTRAMEDULLARY REMOVAL FROM SYRINGOMYELIC CAVITY

CASE REPORT

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The following case is reported primarily to illustrate the value of intramedullary exploration of the spinal cord, particularly where the primary diagnosis is difficult to establish. (For several months prior to operation the case was considered as an example of conversion hysteria.) It is also of interest that a syringomyelic cavity was associated with the tumor; and that after operation the patient suffered “tract” pain of spinal cord origin.

HISTORY

Chief Complaint. Weakness of legs and sensation of pressure in girdle distribution following herniorrhaphy under spinal anesthesia. Symptoms were of approximately 2 years’ duration.

Present Illness. This 35-year-old soldier first noted an uncomfortable pressure sensation in July 1943, immediately after the repair of a right inguinal hernia under spinal anesthesia. The entire abdominal wall was affected, from the level of the 12th ribs to the groins bilaterally. In addition he complained of vague numbness and weakness in the legs. These symptoms lasted about 2 weeks and did not recur until February 1945. At the time of recurrence the patient was overseas and his outfit was alerted for a move forward. No definite neurological signs being found, he was thought to be suffering from conversion hysteria.

Prior to herniorrhaphy he had noted pain of an entirely different character from that of his present illness. There were no known complications during the spinal anesthesia.

Past History. Civilian occupation: Boilermaker. Tropical service: None. Habits: Very moderate use of tobacco, alcohol; no drugs. Illnesses: Usual childhood diseases with no known sequelae. Venereal disease denied. Injuries: Struck in occiput early in 1943, after which he was unconscious for about 10 minutes. The only residual symptoms were occasional mild dizziness and slight blurring of vision on reading. Operations: Herniorrhaphy, inguinal, spinal anesthesia, July 1943.

Family History. No known mental or nervous diseases.

Course of Present Illness. In February 1945 the patient awoke one morning unable to turn in bed because of pain in the lower thoracic spine, accompanied by numbness and weakness of the legs. The back pain was accentuated by attempting to turn, and was accompanied by the same girdle-like sense of uncomfortable pressure that he had experienced nearly 2 years previously. Coughing or straining never aggravated his symptoms, though change of position, particularly forward bending, did. The initial acuity of these complaints soon abated, though the symptoms persisted to the time of operation, along with a tendency to staggering gait, and occasional “dancing” (clonus) of the feet. Tingling sensations of glove distribution began to affect the hands and forearms in February 1945.

Because of these complaints he was admitted to a General Hospital overseas, where the following notes were made: 13 March 1945, normal reflexes of lower extremities; no Babinski. Lumbar puncture: Initial pressure 215 mm. CSF; no block; total protein 27 mg. per cent. X-rays of spine showed minimal osteoarthritic changes in the lower dorsal and upper lumbar vertebrae. 27 March, tests with a Richter neurodrometer showed no sensory loss, which

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together with the history and vague neurological findings led to a tentative diagnosis of conversion hysteria.

On 28 March 1945 the tendon reflexes of the left arm were found slightly more active than those of the right; there was a positive left Hoffmann reflex; the lower abdominal reflexes were sluggish; and there was hypalgesia from the nipple line downwards, with equivocal impairment of position sense and reduced vibratory perception in the toes of both feet. He walked with a rather wide base. On 1 April the sensory level was found to be at the umbilicus. The diagnosis of pernicious anemia was considered until the gastric analysis and blood counts proved to be normal. By 15 April there was a suggestive left Babinski and bilateral ankle clonus.

On 10 July 1945 he was admitted to a General Hospital in the United States with the same complaints. Initial neurological examination disclosed fibrillations of the muscles of the shoulder girdle; some spasticity of the lower extremities; a wide base, some staggering of gait, and a slightly positive Romberg test. The tendon reflexes of all four extremities were hyperactive and rated as 3; the upper abdominals were listed as 2; the lower abdominals 0; cremasterics 2; Babinski positive bilaterally; Hoffmann negative.

Sensation: Glove distribution of hyposthesia almost up to the elbows; variable and vague bilateral sensory level in region of umbilicus downwards for pain, with preservation of touch. Vibratory and thermal perception reduced from knees downwards; position sense

Fig. 1. Photographs of (A) the spinal cord, Th. 8-Th. 10, before removal of tumor, and (B) the tumor tissue (ependymoma), immediately after intramedullary removal, placed on the cottonoid strip at the right. The operative opening in the dorsal part of the cord appears at the left.