

were moved in all directions, but it was impossible to get the patient to make extreme movements of the eyeballs in any directions, nystagmus was not observed, ataxia was present in each upper limb, sensation to pin prick was preserved all over the body, the limbs were not weak, the patellar reflexes were lost even on reinforcement, the Achilles jerk was feeble on each side, the boy was unable to stand alone and would fall backwards if not supported, hemiasynergia and diadococinesia could not be tested for because of the stupor, the corneal reflex was present, the Babinski reflex was very uncertain.

The diagnosis of a lesion of the cerebellum was made and as the symptoms indicated that the progress was gradual in development, a tumor was supposed to be present.

Decompression was performed by Dr. Nassau and was followed rapidly by death on April 25, 1907.

Only the cerebellum and a portion of the pons were obtained for examination. A cavity was found in the interior of the right dentate nucleus, and the left dentate nucleus did not appear to be normal. The small vessels of both cerebellar lobes near and in the dentate nuclei were much congested, and numerous small hemorrhages were found about them with some perivascular round cell infiltration. The vessels of the pons were congested and here also a few small hemorrhages and slight perivascular round cell infiltration were found. As the necropsy was necessarily so incomplete it was impossible to say whether any other intracranial lesion was present or not.

This case in its findings resembles the case reported by E. F. Buzzard in *Brain*, Vol. 29, p. 508, in which thrombosis affecting, and probably destroying the functions of, the dentate nuclei was found.

#### THE SYMPTOM COMPLEX OF TRANSVERSE LESION OF THE SPINAL CORD AND ITS RELATION TO STRUCTURAL CHANGES THEREIN

By Alfred Reginald Allen, M.D.

This paper is founded upon the study of the spinal cord of a woman who died from carcinoma of the vertebra secondary to a primary breast lesion. There were symptoms of transverse lesion of the spinal cord almost two months before death, yet the microscopical study of the spinal cord demonstrated practically no secondary degeneration. Some of the prevailing theories as to parenchymatous regeneration in nerve tissue are mentioned and discussed, and the bearing of the absence of marked histological change in the case cited upon laminectomy to fracture-dislocation of the spinal column with cord symptoms is considered.

#### ASCENDING PARALYSIS

By Alfred Gordon, M.D.

A middle-aged man noticed about two years ago a gradually developing paralysis of the left leg accompanied by pain in the perineal group of muscles. Eighteen months later the same conditions appeared in the left upper extremity. At present he shows a gait resembling largely a hemiplegic one, but there is no rigidity in the limbs. There is considerable

loss of power in the affected limbs. The knee jerks are increased on both sides. There is a faint Babinski and a slight paradoxical sign on the left. The interesting feature about the case is the presence of pain at the beginning of the paralysis.

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Dr. HUGH T. PATRICK in the Chair

## SYRINGOMYELIA WITH KYPHO-SCOLIOSIS AND UNILATERAL TRUNK ANESTHESIA

By E. W. Ryerson, M.D.

The patient is a boy sixteen years old, a patient in St. Elizabeth's Hospital. Family history of no interest. Delivery was by forceps and very difficult. The right shoulder was dislocated or fractured, and the right arm has been paretic since birth. There also was some injury to the head causing unilateral peripheral facial paralysis which lasted a few weeks. He walked when one year old, and shortly afterwards had scarlet fever followed by bilateral suppurative middle ear disease. The latter has recurred from time to time. His health was fairly good until January, 1905, when he was in bed for nine weeks with a right-sided pneumonia, possibly complicated by pleurisy. About a year and a half ago gradual onset of left kypho-scoliosis with convexity to the left. Little or no pain in the back and none in the legs. A brace was put on a year ago and worn for half a year. Then gradual onset of weakness and stiffness in left leg and arm. No sphincter disturbance at any time. No fever.

Examination shows marked diffuse kypho-scoliosis with convexity to the left. Skiagraph negative aside from deformity. No tender point in the spine. Right arm paretic with loss of tendon reflexes (old birth palsy). Left arm slightly paretic, rigid, with increased reflexes. Left leg also spastic, with exaggerated knee jerk, ankle clonus, and extensor response of big toe. Right knee and ankle jerks also exaggerated, with clonus; flexor response of big toe. Abdominal and cremaster reflexes present on right side, absent on left side. Band of anesthesia around left side of the trunk from third to eleventh thoracic segments, with involvement of tactile, pain and temperature senses. Slightly impaired sensation in places on right arm, but no sensory disturbance elsewhere outside of the trunk area mentioned. No ataxia. No cranial nerve or ocular findings; fundi normal. No muscular atrophy.

Tuberculosis, syphilis or neoplasm of the spine or meninges were excluded largely on account of the painless course, and by exclusion syringomyelia was considered the most plausible diagnosis in spite of the absence of sensory dissociation, muscular atrophy and sensory disturbance below the level of the lesion.