Rich, A. R. INNERVATION OF TENSOR VELI PALATINI AND LEVATOR VELI PALATINI MUSCLES. [Johns Hopkins Hosp. Bull., September, 1920.]

The author here concludes that the fifth nerve is the motor nerve to the tensor veli palatini muscle.

Aboularage. FOUR CASES OF ABNORMAL TETANUS. [Il Policlinico, Sez. Chir., July 15, 1920. B. M. J.]

Two cases of delayed tetanus which were fatal and two of local tetanus which recovered are here reported. In the first two cases tetanus developed ninety days after the wound. (In the cases recorded by Jullien the symptoms developed one hundred and nine and one hundred and thirty-three days respectively after the wound.) The explanation of these cases is that the tetanus bacillus, or its spores, lie latent in the wound, or are englobed in the leucocytes, and subsequently become liberated as the result of a slight trauma, such as the cleaning up of an amputation stump, as in the writer's case. Contrary to the general rule in local tetanus, in which the incubation period is usually long, in one of the writer's cases it was only four days. The relatively mild course of local tetanus is attributed by Aboularage to three factors acting separately or in combination—namely, incomplete prophylactic treatment, a small number of weak virulence of the bacilli, and lack of receptivity of the spinal cord segments.

Roques and Condat. OCULAR SYMPTOMS OF TETANUS. [Gaz. des Hôp., Oct. 9, 1920.]

Roques and Condat relate a fatal case of idiopathic tetanus in which a pupillary symptom was notably pronounced. The case was not an example of so-called cephalic tetanus in which the facial nerves are involved, but was of the usual type. The pupils alternately dilated and contracted with a wide amplitude (pupillary nystagmus), without rhythm and independently of the usual factors. The tremor did not cease during sleep or under the full influence of chloral. The dilatation could not be explained by exacerbations of pain alone but bore a notable connection with an approaching paroxysm for which it acted as a certain warning, the pain doubtless playing a causal rôle. It was not absolutely certain, however, that the affection was not due in part to the action of chloral.

Bouman, L. BRAIN CHANGES IN TETANUS. [Nederlandsch Tydschr. voor Geneeskunde, 1919, LXIII, H 2, 1931.]

Bouman has demonstrated to the Amsterdam Neurological Society the brain changes in a case of tetanus. A patient, suffering from paranoid delusions, jumped out of the window, fractured the spine, and after a few days had fatal tetanus. In the medullary substance of the pre-

central gyrus, hippocampus, thalamus, pons and cerebellum were found peculiar small foci, consisting chiefly of glia cells, also plasmodial glial structures, peculiar sausage shaped formations, and, especially at the periphery, rod cells. Some of the foci show a good many red blood corpuscles. When these foci occur, as often happens, at the boundary of cortex or of white matter, the neighboring ganglion cells show little or no change. Also the blood vessels show the characteristic infiltrations with plasma cells and lymphocytes that are found in other inflammations. The small cerebellar foci very closely resemble the bushes (strinkjes) found by Spielmeyer in the cerebella of cases of spotted typhus. In the molecular layer some of these foci extend throughout it, while others are more on its periphery. The largest foci measure about 0.4 mm.; many are smaller. These brain changes in tetanus closely resemble those found in the brain after experimental injection of the toxins of dysentery and of malaria. So far, Bouman has failed to produce them in rabbits by injection of tetanus toxine. The essential change in these toxic processes is a glial reactive proliferation without any proper inflammation. [Leonard J. Kidd, London, England.]

Achard, C. SEROTHERAPY IN TETANUS. [Progrès Médical, July 24, 1920. J. A. M. A.]

Achard describes a case of cephalic tetanus in a woman of 50, seven days after a fall wounding the brow. This form of tetanus is characterized by contraction limited to the muscles of the face and neck, associated very often with facial, sometimes ocular paralysis. The onset is slow, but diagnosis is rendered easy by this peculiar association of contraction and paralysis, while the trismus and presence of a wound nearby naturally suggest tetanus. Treatment is the same as in ordinary cases, sedatives and especially chloral in large doses. The results from serotherapy, though encouraging, are not yet decisive. Its preventive properties are no longer doubted, but its curative action is not yet constant. The serum should be given repeatedly in large doses for eight days, even if during the first days there are no signs of improvement. In this case injection of 440 c.c. brought sufficient improvement for the antiserum to be dropped.

3. SPINAL CORD.

Finlayson, A. D. ATYPICAL CASE OF PROGRESSIVE MUSCULAR DYSTROPHY. [Neur. Bull., November-December, 1919. J. A. M. A.]

The case cited by Finlayson is of interest for the following reasons: the onset at the age of 16 (although there is a possibility that there was facial involvement earlier); the absence of heredity; the first recognized appearance in the muscles of the shoulder girdle, and the absence of any appreciable degree of pseudohypertrophy. The case presents some of the symptoms of all of the three subgroups mentioned by Oppenheim.