

produced is not the result of force from behind, but is due to softening of the tissues of the capillary or arterial walls by the local action of this toxin, thereby producing lysis." This, the author says, is a new conception as regards a cause of retinal hemorrhage, but it establishes a definite etiology of the condition and that is of value. The differential character of the toxins given off by the different strains of bacteria has not yet been studied, but it is known, however, that several varieties produce hemorrhage, and Wells considers it quite probable that of the chemical agencies causing hemorrhage bacterial products are the most important, and Lewis thinks that changes in blood pressure are practically negligible as causes of retinal hemorrhage. This adds also to our understanding of hemorrhages in other parts of the body. In cerebral hemorrhages it is more likely, from whatever source it comes, a protein poison is responsible, weakening the endothelium and causing rupture.

Wallis, G. F. C. OPTIC NERVE, CHIASM, AND SPHENOID BONE. [Practitioner, Jan., 1917.]

The author opposes the orthodox teaching, still largely repeated in the texts, that the optic chiasma occupies the optic groove of the sphenoid bone. As this question has a bearing on many pathological conditions, he has restudied the anatomy of this region in a number of post-mortem subjects. In only one of the eleven bodies examined was the chiasma approaching the more generally accepted position. In this subject, a female aged 93, more than one-half of the chiasma rested upon the optic sulcus and the olivary eminence. The author concludes that while the chiasma does occasionally rest on the optic sulcus, it is nearly always posterior to it. As to the antero-posterior diameter of the chiasma the smallest dimension in the subject examined was 7 mm. and the greatest 11 mm. Measuring the length of the intracranial portion of the optic nerve he found the shortest dimension to be 7 mm. and the greatest 12 mm. The diameter of the intracranial portion of the optic nerve is commonly about 4.5 mm., but may reach 7 mm. The length of the optic canal is usually extremely small (optic foramen), but sometimes the optic nerve is encased in a cylindrical canal of considerable length.

These observations, though based only on a few cases, show the bearing of sphenoidal sinusitis on affections of the optic nerves and chiasma with the consequent field involvement. In case the chiasma happens to be situated almost wholly in front of the pituitary body when that organ is diseased, it may possibly explain those cases where the symptom of bitemporal hemianopsia is absent.

Koeppé, L. NIGHT-BLINDNESS. [Mün. med. Woch., April 9, 1918.]

Hemeralopia, by reason of its present importance in military medicine, is restudied by this author. In contrast to earlier views which at-

tribute this visual defect to lesions of the nervous system, circulatory disturbances, retinal deformations, etc., the author attributes the cause to a diminished transparency of the cornea and lens. Evening light produces relative blindness, because the relative opacity of these structures intercepts the light rays, so that the point of retinal excitation is not reached. By means of a Nernst lamp provided with a slit thus giving enlargements the points brought out are capable of demonstration. Hemeralopic patients frequently show these changes, while by an ordinary visual examination no change of the cornea or lens will be detected. The writer believes that by his method hemeralopia in subjects who claim to have night-blindness can be proven to exist or not; thus it becomes an excellent test for malingering.

Landolt, J. NIGHT-BLINDNESS. [Presse Méd., 1918.]

Three classes are described by this author. False hemeralopia or nocturnal amblyopia is due, he thinks, to refractive errors including lesions of the cornea. True hemeralopias are due to retinochoroiditis, retinitis pigmentosa, choroiditis, etc., the effects of which on visual acuteness had been latent before the night life of the war. Those of the first group may require only glasses, while the second should be transferred to the auxiliary services. Hemeralopia due to poor food and malhygiene which yields rapidly to regimen makes up his third group.

v. Stenitzer and Schroeder. NIGHT-BLINDNESS AND LIVER OPOTHERAPY. [Hospitalstid., Apr. 17, 1918.]

Having made the casual observation that individuals who had eaten liver daily had escaped night-blindness when it attacked a given community, the authors decided to use cooked liver in the treatment of that affection. This idea is not new, especially in Scandinavian countries, for the authors refer to a discussion on night-blindness which appeared in 1904, in this same medical journal, where it was stated that this condition disappeared in tramps and vagabounds after the daily consumption for three successive days of half a pound of calf's liver. Ronne recently made a similar observation, but expressed a doubt concerning any possible specific activity of liver substance, maintaining that the benefit was due to the nutritive value of the liver. The authors subjected thirty-four patients with hemeralopia to exclusive liver treatment, 200 grams of steamed liver being fed them daily. Of this number thirty made complete recoveries and the other four were benefited. The duration of treatment varied from six to seventy-eight days. Most of the patients gained weight, from a fraction of a kilo to over 11 kilos. But at the same time twenty-four controls with night-blindness received no treatment at all, yet twenty recovered completely and three were improved. All controls also gained weight. A careful analysis of the two sets of figures showed nothing in favor of the specific liver treatment.