were several fatal cases the operation was abandoned. The nasal ganglion, also known as Meckel's ganglion, the sphenopalatine ganglion and sphenomaxillary ganglion, is situated in the upper portion of the sphenomaxillary fossa. It receives the majority of its afferent fibers from the superior cervical sympathetic chain. Thus, if nerve impulses are blocked at the nasal ganglion, the results should be similar to those produced by extirpation of the superior cervical sympathetic and the technique is less dangerous and difficult. Sluder has performed this operation in 2,000 cases with no bad results. A few attempts on these lines have been made in patients with increased intraocular tension and it seems established that intraocular tension can be affected by blocking nerve impulses at the nasal ganglion. With the use of cocaine and adrenalin the reduction of tension was 10 mm. Hg. for one hour. Injections of alcohol caused a drop of 15 mm. Hg. for ten days. This procedure carried out four days before operation will prove to be of value. [Aust. M. J.]

Terrien, F. RENAL RETINITIS. [*Presse Médicale*, August 24, 1921.]

This clinical paper first describes the usual appearances of a renal retinitis. The changes seen are edema of the papilla, small hemorrhages in the neighborhood of the papilla, white areas in the retina and the macular star. The area of the retina affected is generally limited to a region of three to five disc diameters, with the disc as center. The retina is considerably thickened to eight or ten times the normal by the edema and exudates. The edema is mostly in the intergranular layer, between the external and internal granular layers. Here also are the exudates, which are composed of fibrous clots which form the white plaques. The edema and exudates may be so abundant as to cause a detachment of the retina from the layer of rods and cones. This might be described as an intraretinal detachment and should be distinguished from the usual detachment when the remainder of the retina separates from the pigment layer which it leaves on the choroid, subsequent to the cleavage of the secondary optic vesicle. The albuminuric detachment is curable, should the retinal edema subside, contrasting in this respect with the classical detachment. The author does not agree with the German view that the retinitis is due to disturbance of the blood vessels. He believes that it is rather due to the failure of the elimination of urea. In many cases the classical picture may be wanting in certain features. There may be a retinitis without defective lesions, characterized by uræmic amaurosis, which is generally transitory and of cerebral origin; sometimes by the presence of central scotomata and rarely by alteration of the light and color senses. Another form is characterized by mild optic neuritis, without other changes in the retina. Rarely true detachment of the retina occurs and in some cases glaucoma. Atropine should be used cautiously in the examination of these cases. The prognosis is grave. Three fourths of the patients die within one year. The prognosis is

more favorable in pregnancy. The treatment is that of nephritis. Sometimes lumbar puncture is advisable. The injection of milk is strongly condemned.

Ginestous. CONGENITAL PARALYSIS OF THE RIGHT EXTERNAL RECTUS. [Gaz. hebdomadaire des Sci. Méd. de Bordeaux, February 15, 1920.]

A girl, aged seven months, showed complete internal strabismus of the left eye. Ophthalmoscopic examination revealed slight hypermetropia, but no lesions were detected in the fundus. The infant's heredity and personal history were excellent, and no other abnormalities were present. Functionally strabismus could be excluded, and the condition was therefore congenital, being due to absence of the muscle, a vicious insertion, or a congenital abnormality of the centers of the external rectus.

Grant, Francis C. ANATOMIC STUDY OF INJECTION OF SECOND AND THIRD DIVISIONS OF TRIGEMINAL NERVE. [J. A. M. A., March 18, 1922.]

Injections into the second and third divisions of the nervus trigeminus have become a common procedure. The descriptions in the literature which various writers have given of the technic of injecting these two divisions of the fifth nerve may seem precise, when read, but are disappointing in their practical application. Any attempt to reach a nerve trunk lying deep beneath the skin, and emerging from bony orifices in the skull, requires definite landmarks and angles as guides to the approach. In the clinic with which Grant is connected, a zygometer is used, which helps in great measure to determine accurately the point on the face at which the needle should be introduced to reach a particular nerve trunk. Using this instrument to standardize the points of insertion of the needle through the skin, the angles in the horizontal and vertical plane through which the needle must pass from this fixed surface point to enter the nerve trunk have been worked out. The details are given.

Turner, A. L. PARALYSIS OF THE VOCAL CORDS. [Journal of Laryngology and Otology, August, 1921.]

During twelve years this observer has seen six patients suffering from paralysis of the vocal cords due to pressure on the recurrent laryngeal nerve as the result of glandular enlargement consequent on malignant tumor of the breast. In each instance the breast and the axillary glands on the side of the tumor had been removed. In one case the condition was a melanotic sarcoma, in the others a scirrhus cancer. Hoarseness developed at varying periods after removal of the tumor, after eight months in the case of the sarcoma and after an average of three and a half years in the others. The paralysis was homolateral (right) in four cases, including that of the sarcoma, and contralateral in two cases. In the scirrhus cases the supraclavicular lymphatic glands