

Nursing of Diseases of the Eye.

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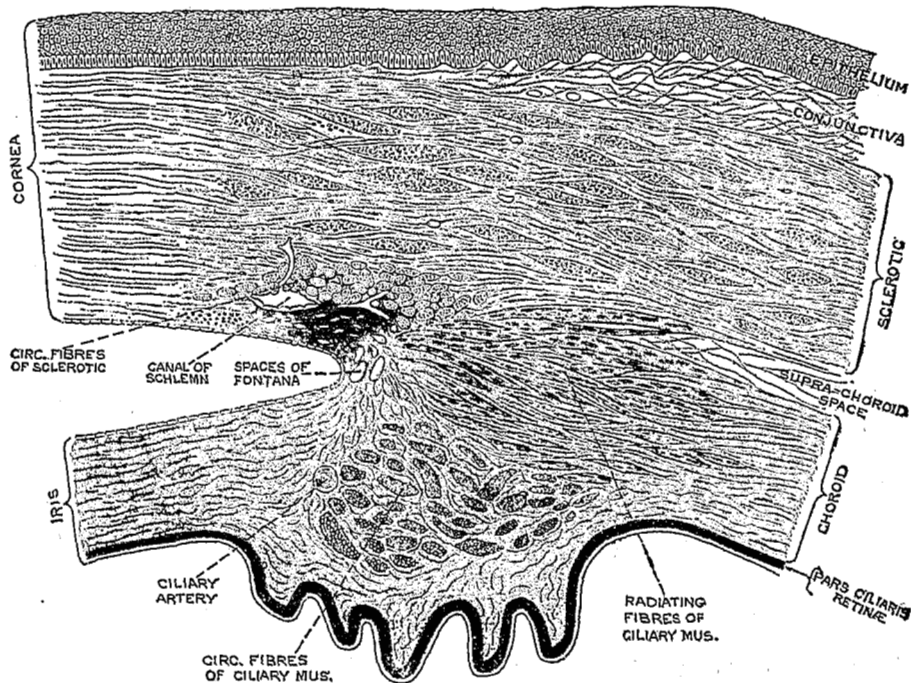
The circulation of fluids through the eye has a very serious part to play in the preservation of normal vision.

The healthy eyeball has a certain definite interocular tension, which cannot be gravely departed from for long without serious damage. If it be even slightly raised it may cause pressure-atrophy of the optic nerve and retina (probably primarily of the former). The vitreous humour is naturally

through the suspensory ligament of the lens into the aqueous chamber and then makes its escape into the canal of Schlemm: through numerous small apertures at the junction of cornea and iris-base, the spaces of Fontana. When this in- and out-flow maintain their normal proportion there is a certain definite tension of the globe which is designated "normal" or "T.n."

The estimation of tension is one of the hardest points in ophthalmic surgery for the beginner. He has to set up a standard for himself in his own mind above and below which the tension must not rise or fall.

The method of estimation is thus accomplished: Standing in front of the patient the examiner



* Section of Sclero Corneal Junction.

the chief factor to maintain tension, but has no blood vessels of its own, and has to rely on the vessels of the choroid for its nutrition. The ciliary processes and the glands of Collins appear, from careful examination, to be the immediate source of the fluids which pervade and nourish the vitreous humour. This has been shown by injecting various substances into the veins of animals, and examining the vitreous at intervals afterwards. The diffusible salts were found in greatest quantity near the ciliary processes. The question how the fluid escaped from the vitreous was longer in doubt. The experiments of Priestley Smith, however, have placed it almost beyond discussion that all the fluid passes

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passes the forefinger of his left hand into the furrow above the upper lid, between the globe and the orbit with the pulp of the finger against the globe until the globe is steadied by the wedge: the forefinger of the right hand, alongside of this, dimples the sclerotic by slight pressure, and the effort required is used by the surgeon to teach the intraocular tension.

A system of conventional standards has been adopted varying from T+3, which represents inability of the finger to make an impression on the globe, to T-3, in which no resistance at all is felt by the observer.

It is clear that the tension may vary with an alteration either in the secretion or excretion of fluid. If the excretory channels are blocked, the

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