THE RELATIONSHIP OF OPHTHALMOLOGY TO GENERAL MEDICINE AND SURGERY.

A Clinical Lecture

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Physicians and surgeons, and oculists as well, are too prone to think of ophthalmology as that department of medicine and surgery that deals only with the eyeballs and the orbital contents. Ophthalmology has a much wider scope, a scope that brings it into the closest clinical relationship to every-day experience in general practice.

Anatomically, the visual apparatus comprises the eyeballs, the extra-ocular muscles and other intra-orbital structures. Through the optic nerves, the sensory and the motor nerves, and the sympathetic system, it is indissolubly associated with the basal ganglia of the brain, the cerebral cortex, the medulla, and the spinal cord. The optic nerves and the retinae are processes of the cerebro-spinal system.

The optic nerve and its distribution, the retina, is the only living nerve that may be seen by the observer. Changes in those structures, whether local in origin, or whether they be manifestations of disorders in the central nervous system, or in the circulatory system, or in the abdominal viscera, may be seen in their incipient stages and followed to their conclusion.

The retinal vessels are the only living blood vessels that are visible, and changes in them, both functional and organic changes, a rereadily distinguished by ophthalmoscopic examination. Such observations may reveal the state of the circulatory system at large, although a normal condition of the retinal vessels and circulation does not signify a normal state of the general circulatory apparatus. On the other hand, an abnormal state of the retinal vessels and circulation does indicate that there is a corresponding condition elsewhere, and, especially, in the cerebro-spinal distribution.