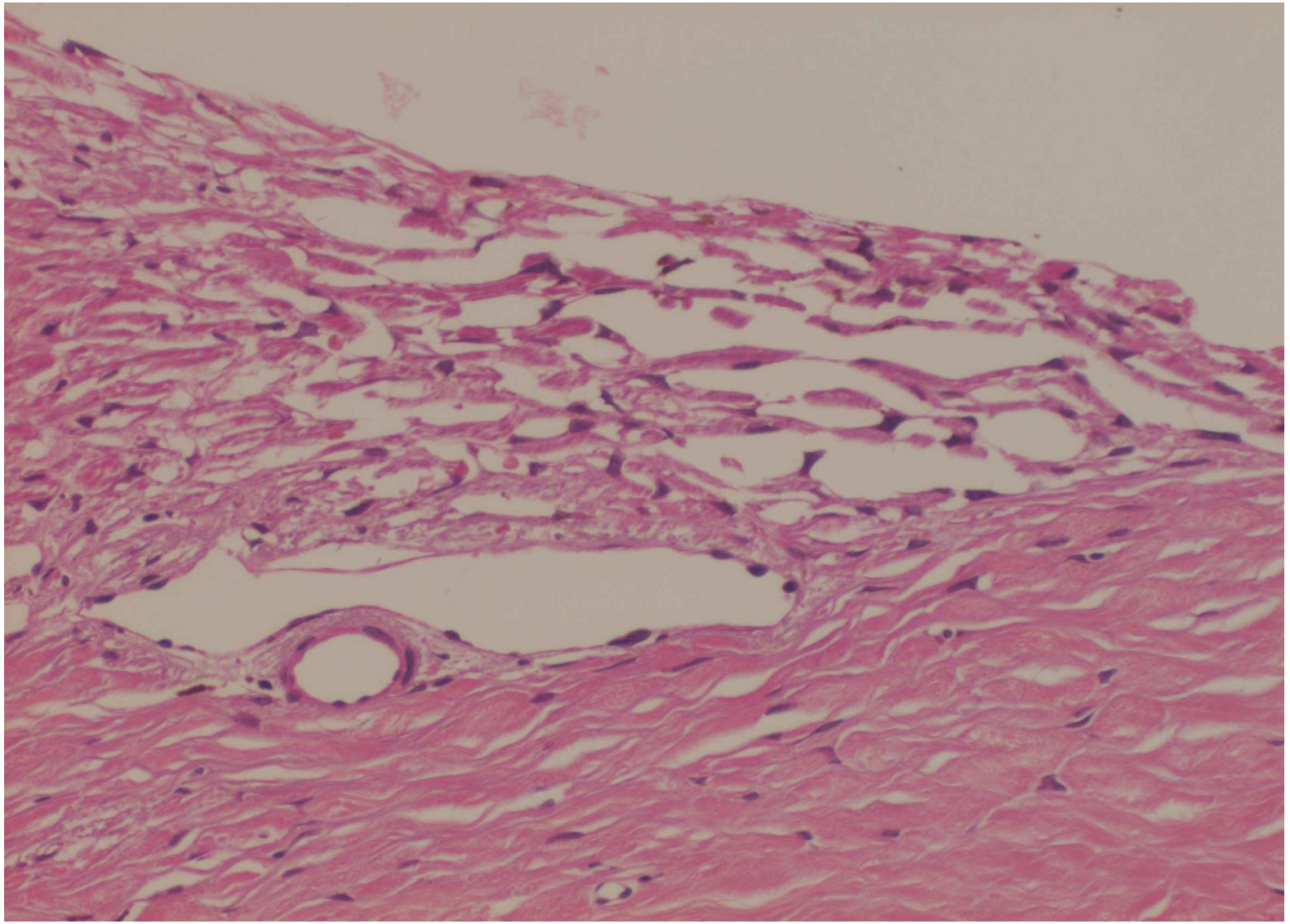
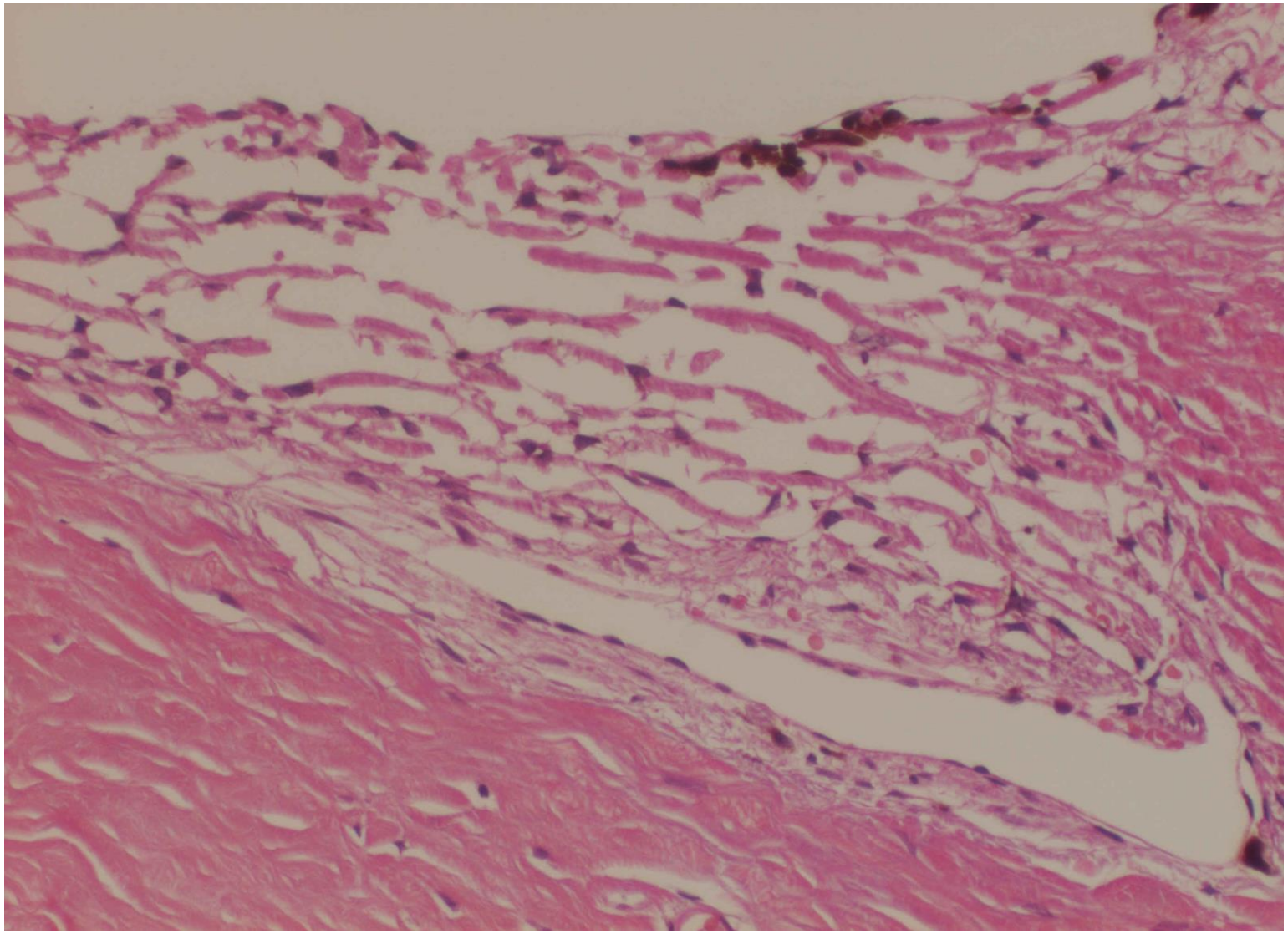
Glaucoma

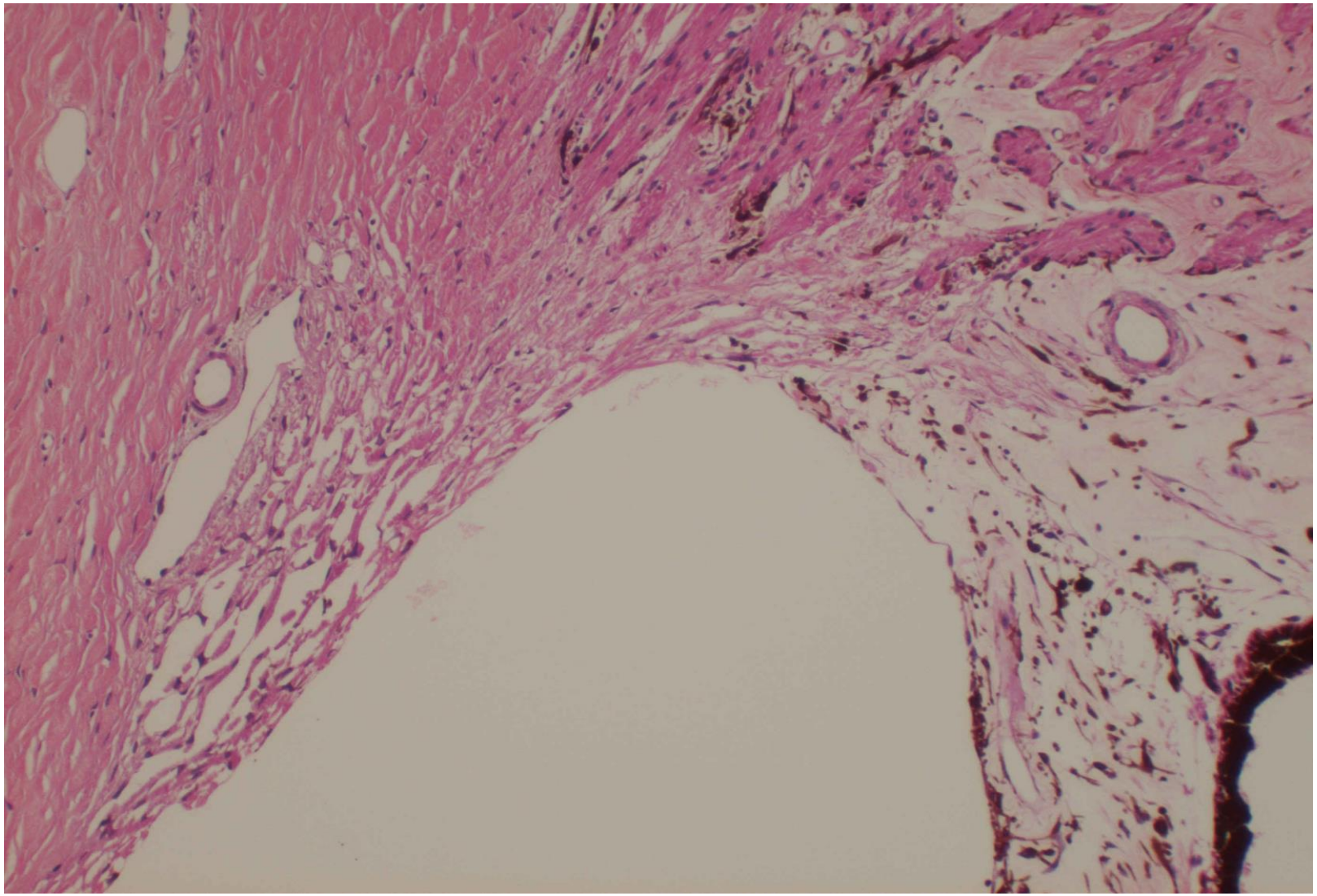
The aqueous humor normally plays roles in nutrient delivery and waste disposal for the cells. It is secreted from the ciliary body epithelium and drains out through the trabecular meshwork at the anterior chamber angle. When this flow is disrupted, the pressure within the eye is increased. The disruption can occur in two ways. 1) blockage at the drainage at the trabecular meshwork (in open angle glaucoma) and 2) narrowing of the angle of drainage (in angle closure glaucoma). Age is the most common factor for the disruption. With age the trabecular meshwork works less efficiently, resulting in an increased pressure of aqueous humor in the anterior chamber of the eye.



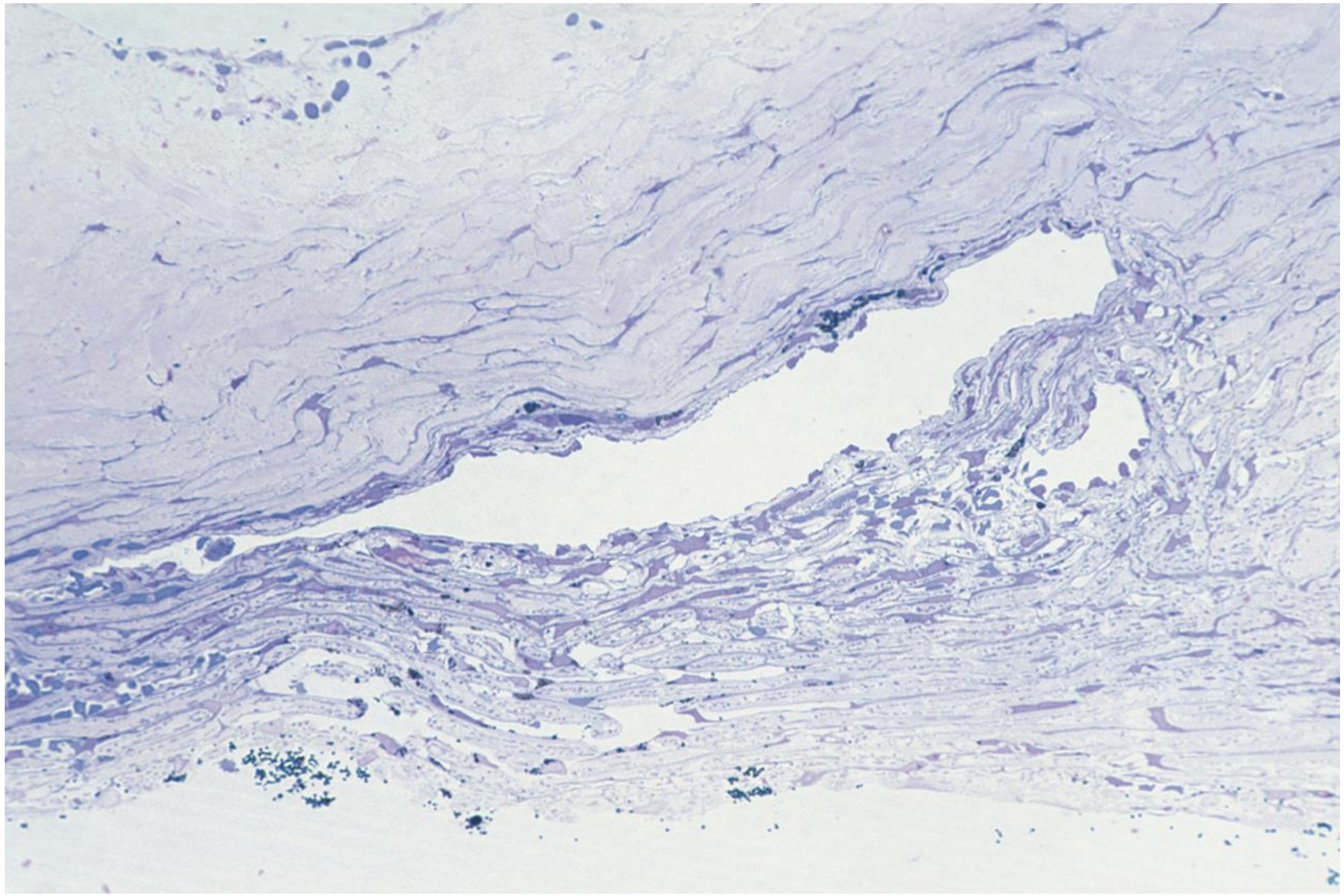
Normal venous sinus of sclera (Schlemm’s canal) at the anterior chamber angle. H&E-1



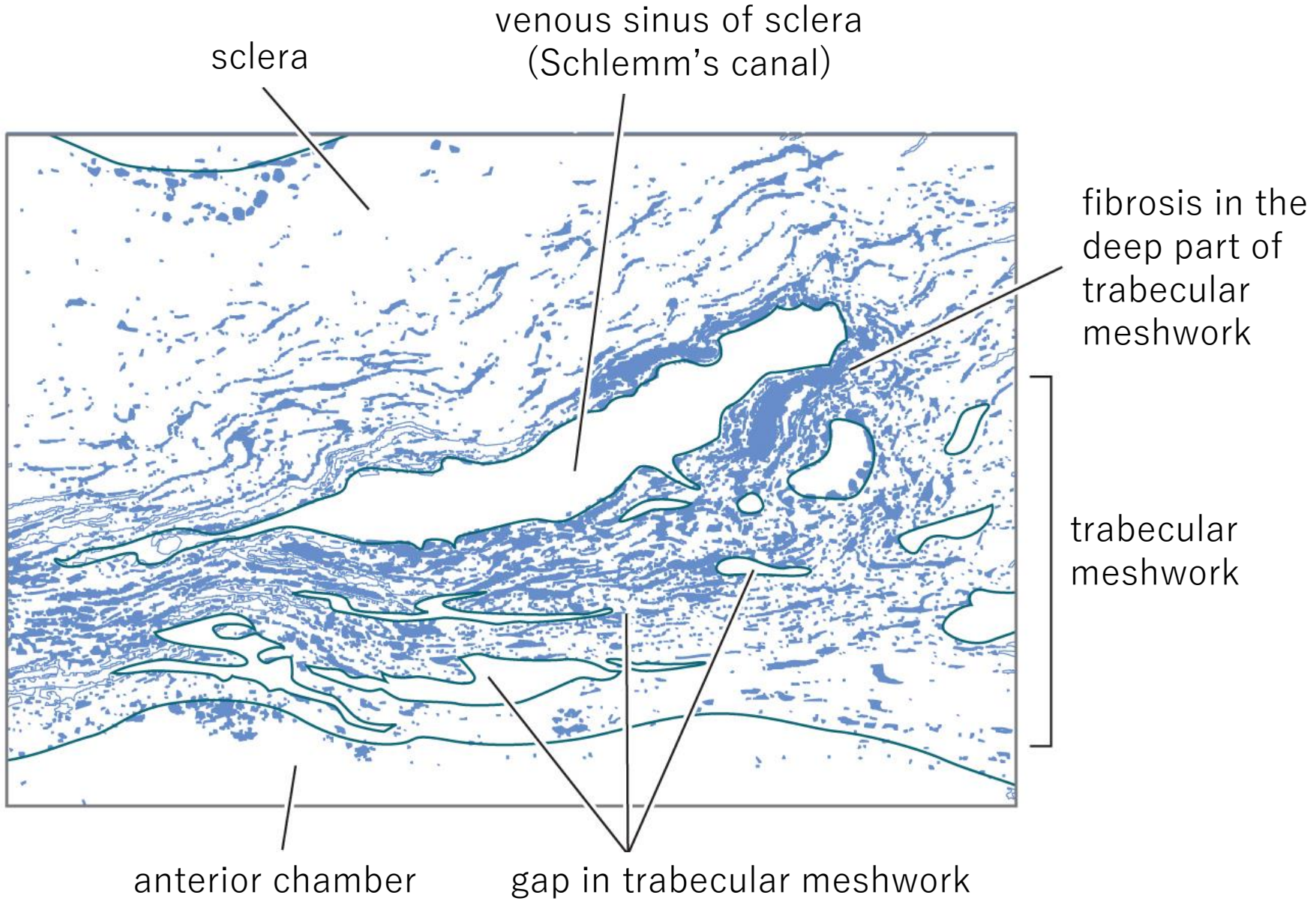
Normal venous sinus of sclera (Schlemm's canal) at the anterior chamber angle. H&E-2



Normal venous sinus of sclera (Schlemm’s canal) at the anterior chamber angle. H&E-3



Open angle glaucoma in a 65-year-old male patient. Trabeculectomy specimen shows fibrosis in the deep part of the trabecular meshwork. See a schematic illustration in the newt slide. Toluidine blue staining for EM specimen



Open angle glaucoma in a 65-year-old male patient. A schematic illustration of the figure, indicating fibrosis in the deep part of the trabecular meshwork.