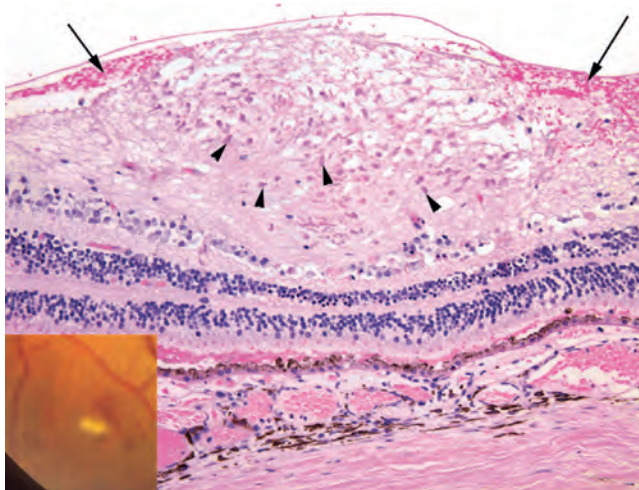
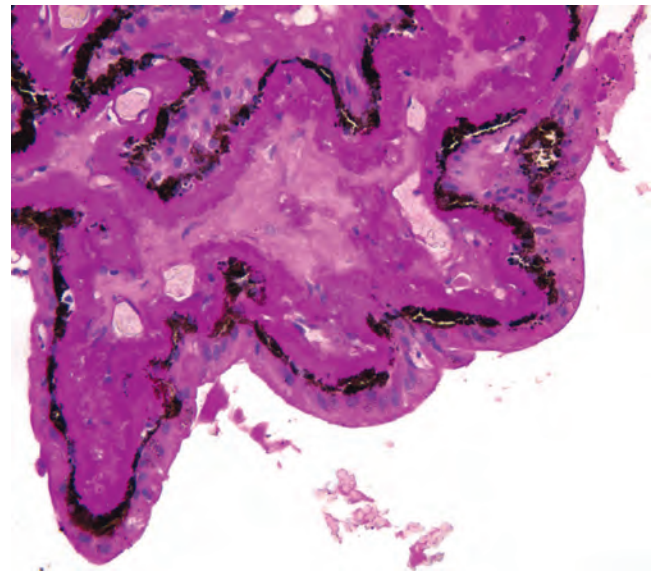


**Figure 29-18** The retina in hypertension. **A**, The wall of the retinal arteriole (*arrow*) is thick. Note the exudate (*e*) in the retinal outer plexiform layer. **B**, The fundus in hypertension. The diameter of the arterioles is reduced, and the color of the blood column appears to be less saturated (copper wire–like). If the wall of the vessel were thicker still, the degree of red color would diminish such that the vessels might appear clinically to have a “silver wire” appearance. In this fundus photograph, note that the vein is compressed where the sclerotic arteriole crosses over it. (**B**, Courtesy Dr. Thomas A. Weingeist, Department of Ophthalmology and Visual Science, University of Iowa, Iowa City, Ia.)



**Figure 29-19** Nerve fiber layer infarct. A “cotton-wool spot” is illustrated in the *inset*, adjacent to a flame-shaped (nerve fiber layer) hemorrhage. The histology of a cotton-wool spot—an infarct of the nerve fiber layer of the retina—is illustrated in the photomicrograph. A focal swelling of the nerve fiber layer is occupied by numerous red to pink cytod bodies (*arrowheads*). Hemorrhage (*arrows*) surrounding the nerve fiber layer infarct as illustrated here is a variable and inconsistent finding. (Fundus photograph, Courtesy Dr. Thomas A. Weingeist, Department of Ophthalmology and Visual Science, University of Iowa, Iowa City, Ia.)



**Figure 29-20** The ciliary body in chronic diabetes mellitus, periodic acid–Schiff stain. Note the massive thickening of the basement membrane of the ciliary body epithelia, reminiscent of changes in the mesangium of the renal glomerulus.