Foveal Cone Density and Total Number

Christine A. Curcio, 12/28/09

- A. Individual variability in human foveal cone density, determined in whole mounted retinas. H5 represents a mean of 2 fellow eyes. The >3-fold range in cone density disappears by 0.3 mm eccentricity. For reference, the first rods appear between 0.15 and 0.2 mm. Modified from Figure 7 of Curcio et al., J Comp Neurol 290:497, 1990.
- B. The total number of cones within the central 0.8 mm of the fovea is remarkably stable throughout adulthood, at ~32,000. Eyes were obtained from donors within 4 hr of death with grossly normal maculas or from maculas with drusen and pigmentary changes consistent with early age-related maculopathy. Several eyes were obtained within 0.5 hr of surgical exenteration from patients with craniofacial tumors.

 Modified from Figure 1 of Curcio, Eye 15:376, 2001.

