

NTP Nonneoplastic Lesion Atlas



Eye, Cornea – Neovascularization



Figure Legend: Figure 1 Eye, Cornea - Neovascularization in a male F344/N rat from a chronic study. There are multiple small blood vessels in the stroma (arrows) with concurrent inflammation and epithelial hyperplasia. **Figure 2** Eye, Cornea - Neovascularization in a male F344/N rat from a chronic study (higher magnification of Figure 1). Multiple small blood vessels are proliferating in the stroma (arrows); there is concurrent stromal inflammation.

Comment: The corneal stroma is normally avascular, but damage from various causes may result in neovascularization. Corneal neovascularization (Figure 1 and Figure 2) is characterized by the proliferation of multiple small blood vessels in the corneal stroma. There is often concurrent stromal inflammation and epithelial hyperplasia. In most cases of neovascularization, the primary insult is inflammation resulting from various causes. However, neovascularization can also develop in the cornea of laboratory rodents fed diets deficient in certain nutrients.

Recommendation: When neovascularization occurs without concurrent inflammation, it should be diagnosed and assigned a severity grade. When neovascularization is considered a feature of inflammation, it should not be diagnosed separately, unless warranted by severity, but should be described in the pathology narrative.



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