Eye, Cornea – Fibrosis

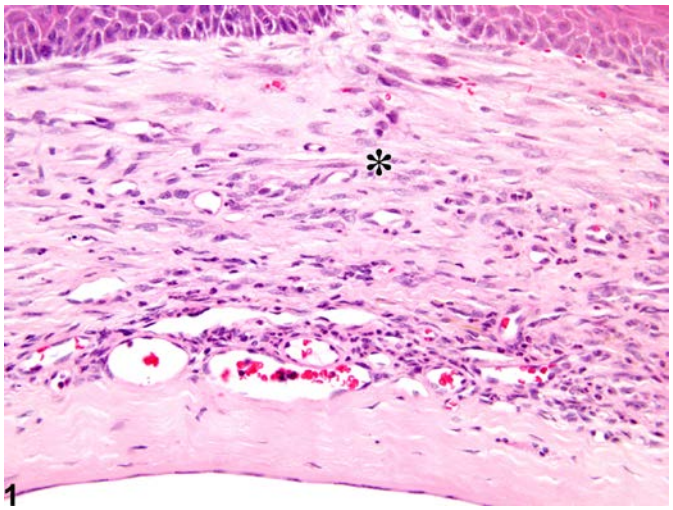

Figure Legend: Figure 1 Eye, Cornea - Fibrosis in a male B6C3F1 mouse from a chronic study. The normal orderly collagen lamellar architecture is replaced by coarse, irregular bundles of collagen fibers.

Comment: Fibrosis of the corneal stroma (Figure 1) is characterized by replacement of the normal orderly collagen lamellar architecture by coarse, irregular bundles of collagenous fibers (scar tissue). These changes result in loss of corneal transparency. The new replacement collagen is produced by the resident stromal keratocytes, which respond to injury by undergoing phenotypic transition into fibroblasts and myofibroblasts, as well as by bone-marrow-derived cells that migrate to the cornea in response to injury. Corneal fibrosis is a reactive change resulting from various causes that generally occur in conjunction with neovascularization and/or inflammation (Figure 1).

Recommendation: Fibrosis that occurs without, or with only minimal, concurrent inflammation, it should be diagnosed and assigned a severity grade. When corneal fibrosis is considered secondary to inflammation, it should not be diagnosed separately unless warranted by its severity, though it should be described in the pathology narrative.

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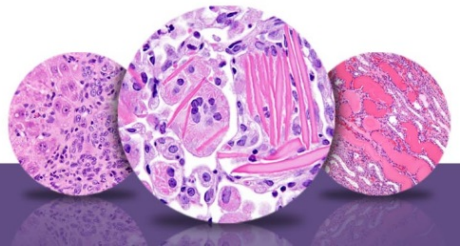

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