Figure Legend: Figure 1 Eye, Cornea - Metaplasia, Goblet cell in a female B6C3F1 mouse from a chronic study. There are clusters of cells similar to normal conjunctival goblet cells in the corneal epithelium (arrow). Figure 2 Eye, Cornea - Metaplasia, Goblet cell in a female B6C3F1 mouse from a chronic study (higher magnification of Figure 1). There are large goblet cells within the corneal epithelium (arrow).

Comment: Goblet cells are normally present in the conjunctival epithelium, but when they appear in the corneal epithelium, it is recognized as a metaplasitic change (Figure 1 and Figure 2). Such so-called conjunctivalization of the corneal epithelium is considered a secondary reactive change, often associated with corneal neovascularization and/or inflammation from various causes.

Recommendation: Corneal goblet cell metaplasia should be diagnosed and assigned a severity grade whenever present. It is generally reactive and secondary to other pathologic processes, but it’s unusual nature necessitates its diagnosis. When present, inflammation should be diagnosed separately.

References:
Eye, Cornea – Metaplasia, Goblet Cell

References:

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