Nose, Septum – Perforation

Figure Legend: Figure 1 Nose, Septum - Perforation in a female B6C3F1/N mouse from a chronic study. A perforation is present in the nasal septum (arrow). Figure 2 Nose, Septum - Perforation in a female B6C3F1/N mouse from a chronic study (higher magnification of Figure 1). Squamous metaplasia of the respiratory epithelium (arrow) is adjacent to the perforation.

Comment: Septal perforation (Figure 1 and Figure 2) has not been seen as a background lesion. It typically occurs after exposure to highly irritating agents that cause necrosis and ulceration of the mucosa and atrophy of the nasal turbinates. Therefore, it is typically preceded or accompanied by epithelial lesions, such as squamous metaplasia, ulceration or necrosis, inflammation, and turbinate atrophy. It is most commonly seen in chronic inhalation studies.

Recommendation: Septal perforation should be diagnosed whenever present but need not be graded. Other lesions, including epithelial lesions (degeneration, necrosis, ulceration, squamous metaplasia, etc.), turbinate atrophy, and inflammation, should be diagnosed separately.

Reference:
Full Text: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1568333/
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