

NTP Nonneoplastic Lesion Atlas

Eye – Phthisis Bulbi



Figure Legend: Figure 1 Eye - Phthisis bulbi in a female B6C3F1 mouse from a chronic study. Phthisis bulbi ("end-stage" eye) is characterized by prominent shrinkage of the globe with marked structural displacement and disorganization. Figure 2 Eye - Phthisis bulbi in a female B6C3F1 mouse from a chronic study. The globe is shrunken with marked structural displacement and disorganization. Figure 3 Eye - Phthisis bulbi in a female B6C3F1 mouse from a chronic study. There is marked shrinkage of the globe (arrow) with marked structural displacement and disorganization. Figure 4 Eye -Phthisis bulbi in a female B6C3F1 mouse from a lifetime study. The globe is shrunken (arrow) with marked structural displacement and disorganization and compressed by a large Harderian gland carcinoma (H).





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Comment: Phthisis bulbi (Figure 1, Figure 2, Figure 3, and Figure 4) is the diagnostic term used for the "end-stage" eye morphology resulting from severe injury from various causes, such as trauma, inflammation, excess exposure to ionizing radiation or ambient light, or physical compression by spaceoccupying orbital masses, such as neoplasms of the Harderian gland (Figure 4). Phthisis bulbi is characterized by prominent shrinkage of the globe with marked displacement and disorganization of ocular structures.

Recommendation: Phthisis bulbi should be diagnosed as present without assignment of a severity grade. Changes in the various ocular subtopographies should not be diagnosed separately as they are included in the collective diagnostic term "phthisis bulbi." If an inciting cause (e.g., a foreign body) is present, it should be diagnosed separately, and the association between the two lesions should be described in the narrative.

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