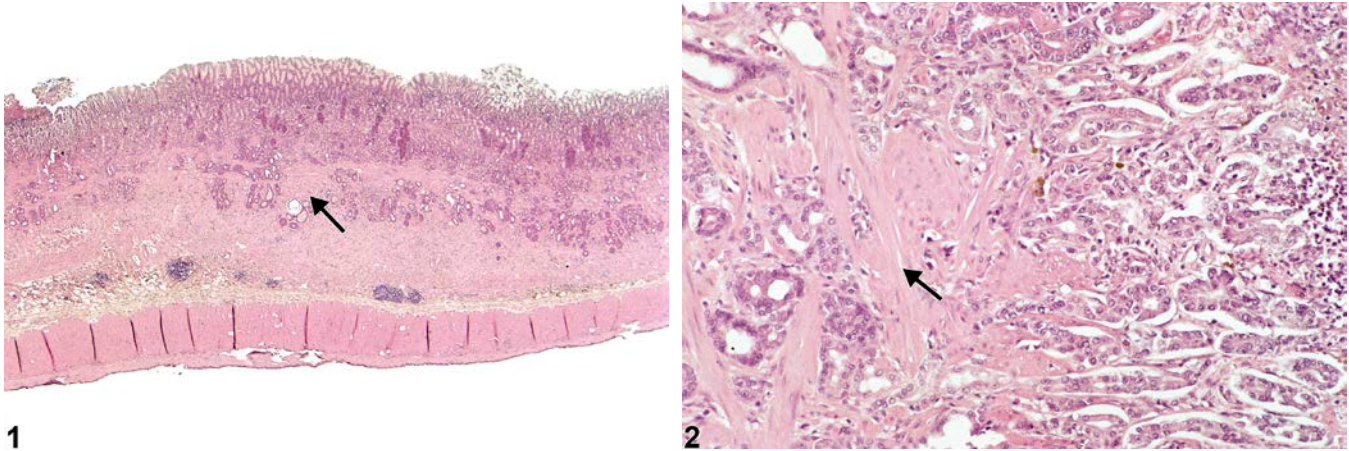


# NTP Nonneoplastic Lesion Atlas

## *Stomach, Glandular Stomach – Fibrosis*



**Figure Legend:** **Figure 1** Stomach, Glandular stomach - Fibrosis in a male F344/N rat from a chronic study. Dense collagen (arrow) separates and replaces glands in the mucosa. **Figure 2** Stomach, Glandular stomach - Fibrosis in a male F344/N rat from a chronic study (higher magnification of Figure 1). Dense collagen (arrow) separates and replaces glands in the mucosa.

**Comment:** Fibrosis occurs in the stomach as the result of necrosis of the connective tissue and epithelial cells required to regenerate the parenchymatous elements of the tissue. Following necrosis, the space is filled with fibrovascular tissue, which contains many newly formed capillaries and fibroblasts, producing an immature collagenous matrix. As fibrosis matures, it becomes less vascular and more collagenous until eventually it is fairly avascular and consists primarily of dense bundles of collagen and relatively low numbers of fibroblasts. Ulceration and/or severe inflammation can result in fibrosis with loss of glandular tissue.

**Recommendation:** Whenever present, fibrosis should be diagnosed and graded based on the extent of the lesion. Fibrosis as a minor component of another primary process, such as inflammation, ulceration, or neoplasia, is not documented separately. Atrophy of glandular mucosa and inflammatory cells that may be present in areas of fibrosis should not be diagnosed separately unless they are a prominent component of the lesion.



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