

NTP Nonneoplastic Lesion Atlas

Stomach, Forestomach – Edema

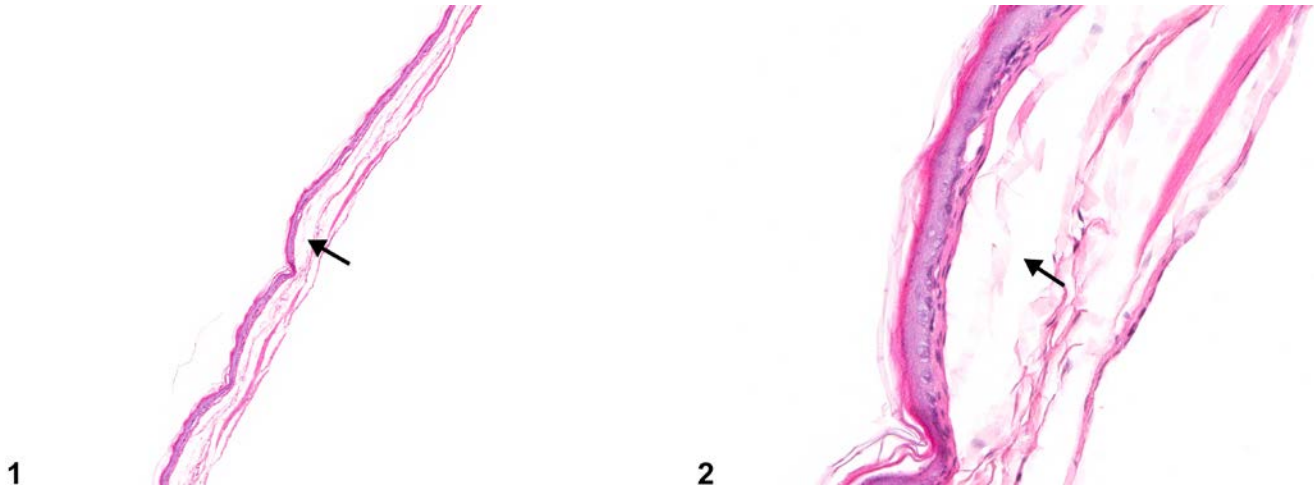


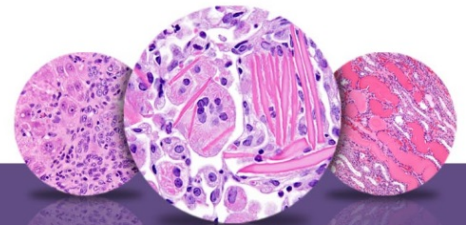
Figure Legend: **Figure 1** Stomach, Forestomach - Edema in a male F344/N rat from a chronic study. Edema fluid of low protein content results in clear spaces in the tissues (arrow). **Figure 2** Stomach, Forestomach - Edema in a male F344/N rat from a chronic study (higher magnification of Figure 1). Edema separates the connective tissue and muscle fibers of the forestomach (arrow).

Comment: Edema fluid is often lost at processing and appears as clear spaces in tissues (Figure 1 and Figure 2), although edema fluid with a higher protein content will be more eosinophilic in sections. Edema is the result of alteration in any of the factors that regulate normal fluid distribution among the plasma, interstitium, and cells, such as increased vascular permeability, increased intravascular hydrostatic pressure, decreased intravascular osmotic pressure, and decreased lymphatic drainage.

Recommendation: When edema is seen in the absence of other lesions, it should be recorded and graded. However, edema is typically a component of another process, such as acute inflammation, so it is not typically recorded separately. If it is a significant component of the lesion, it may be recorded in addition to the primary lesion.

References:

Mosier DA. 2007. Vascular disorders and thrombosis. In: Pathologic Basis of Veterinary Disease (McGavin MD, Zachary JF, ed). Mosby, St Louis, MO, 63-99.



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