



NTP Nonneoplastic Lesion Atlas

Stomach, Glandular Stomach – Hemorrhage

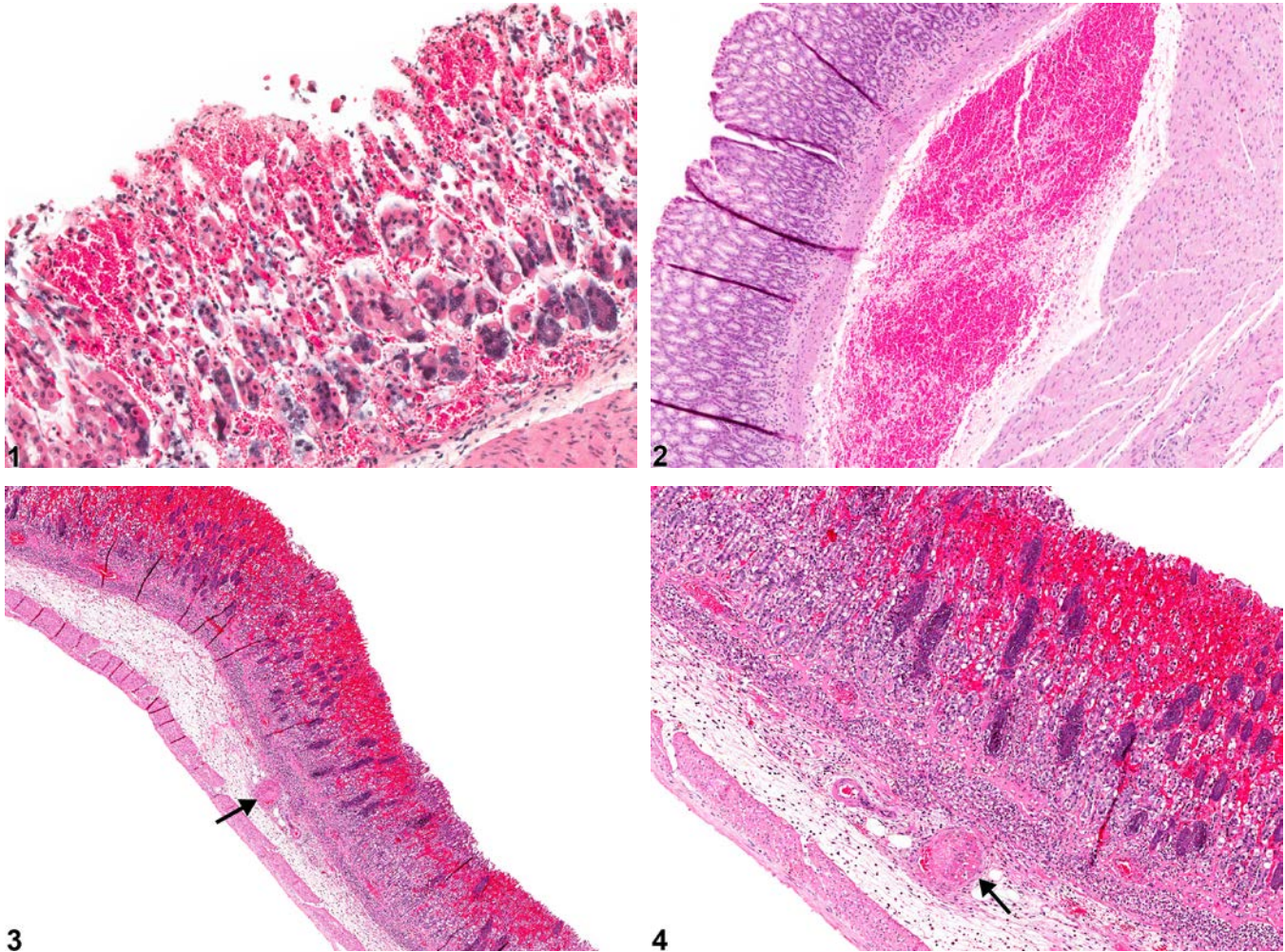


Figure Legend: **Figure 1** Stomach, Glandular stomach - Hemorrhage in a female B6C3F1 mouse from a subchronic study. There is hemorrhage in the mucosa. **Figure 2** Stomach, Glandular stomach - Hemorrhage in a male F344/N rat from a chronic study. There is hemorrhage in the submucosa. **Figure 3** Stomach, Glandular stomach - Hemorrhage in a male F344/N rat from a chronic study. There is hemorrhage in the mucosa and a vascular thrombus in the submucosa (arrow). **Figure 4** Stomach, Glandular stomach - Hemorrhage in a male F344/N rat from a chronic study (higher magnification of Figure 3). There is hemorrhage in the mucosa and a vascular thrombus in the submucosa (arrow).

Comment: Hemorrhage characterized by free red blood cells in the lamina propria (Figure 1), submucosa (Figure 2) or muscular wall of the stomach is uncommon and usually secondary to



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treatment-related inflammation, erosion, ulceration, necrosis, or thrombosis (Figure 3 and Figure 4, arrows).

Recommendation: Hemorrhage should be diagnosed and graded. Hemorrhage in an area of necrosis or inflammation is usually not diagnosed separately, unless it is a prominent component of the lesion, but should be described in the pathology narrative.

References:

MacKenzie WF, Alison R. 1990. Heart. In: Pathology of the Fischer Rat (Boorman GA, Montgomery CA, MacKenzie WF, eds). Academic Press, San Diego, CA, 461-472.

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