



NTP Nonneoplastic Lesion Atlas

Tongue – Hemorrhage

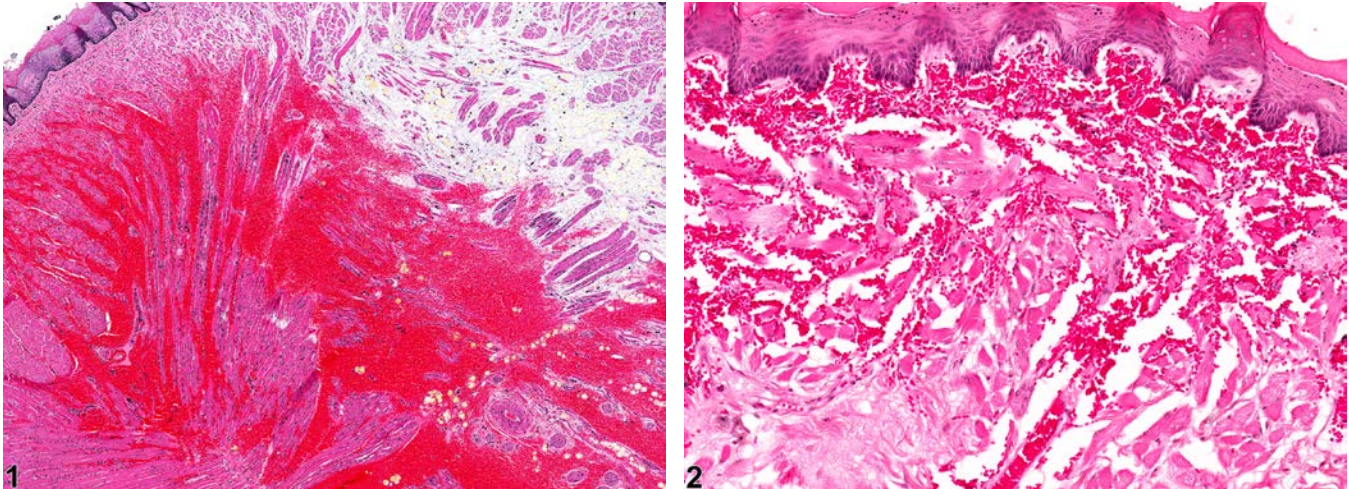


Figure Legend: **Figure 1** Tongue - Hemorrhage in a female Harlan Sprague-Dawley rat from a chronic study. **Figure 2** Tongue - Hemorrhage in a female F344/N rat from a chronic study.

Comment: Hemorrhage (Figure 1 and Figure 2) can be due to chemical exposure, trauma, or other damage to blood vessels or due to a chemical that interferes with factors necessary for normal clotting. It may also be a component of acute inflammation.

Recommendation: Hemorrhage should be diagnosed and graded, unless it is secondary to inflammation or ulceration, in which case it should not be diagnosed separately but should be described in the pathology narrative.

Reference:

Ackermann MR. 2007. Chronic inflammation and wound healing. In: Pathologic Basis of Veterinary Disease, 4th ed (McGavin MD, Zachary JF, eds). Mosby, St Louis, MO, 101-152.

Authors:

Linda H. Kooistra, DVM, PhD, DACVP
Pathologist
Charles River Laboratories, Inc.
Research Triangle Park, NC

Abraham Nyska, DVM, Diplomate ECVF, Fellow IATP
Expert in Toxicologic Pathology
Visiting Full Professor of Pathology
Sackler School of Medicine, Tel Aviv University
Timrat Israel