Urinary bladder – Necrosis

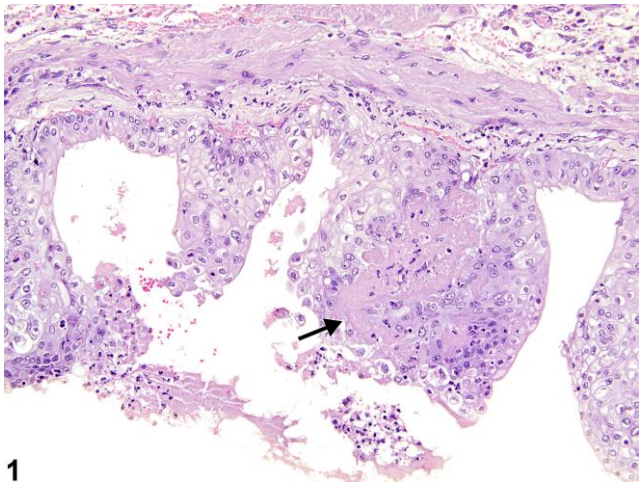

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Figure Legend: Figure 1 An area of urothelial necrosis (arrow) associated with acute inflammation from a male F344/N rat in a chronic study.

Comment: Necrosis of the urothelium may be due to cytotoxicity, including direct chemical administration or irritation from crystals and calculi and may be associated with ulceration and inflammation. Necrosis is recognized by cellular eosinophilia and fragmentation, as well as nuclear pyknosis and karyorrhexis (Figure 1). Degeneration may precede necrosis, but degeneration by itself is infrequently diagnosed. Areas of previous necrosis can undergo regeneration and heal or result in urothelial hyperplasia.

Recommendation: Necrosis of the urothelium should be diagnosed and given a severity grade. The pathologist should use his or her judgment in deciding whether or not secondary lesions associated with necrosis are prominent enough to warrant a separate diagnosis.

References:

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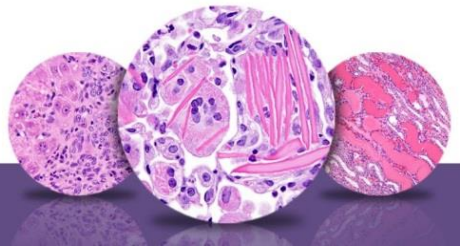

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References:

Greaves P. 2012. Urinary bladder. In: Histopathology of Preclinical Studies, 4th ed. Elsevier, Amsterdam.
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