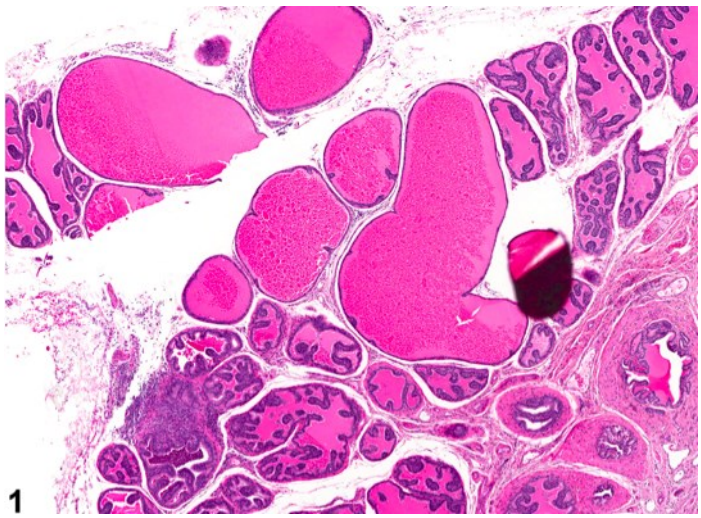
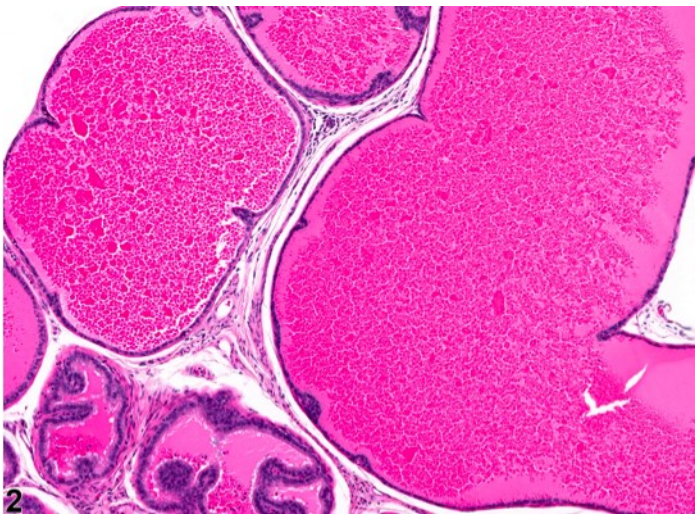
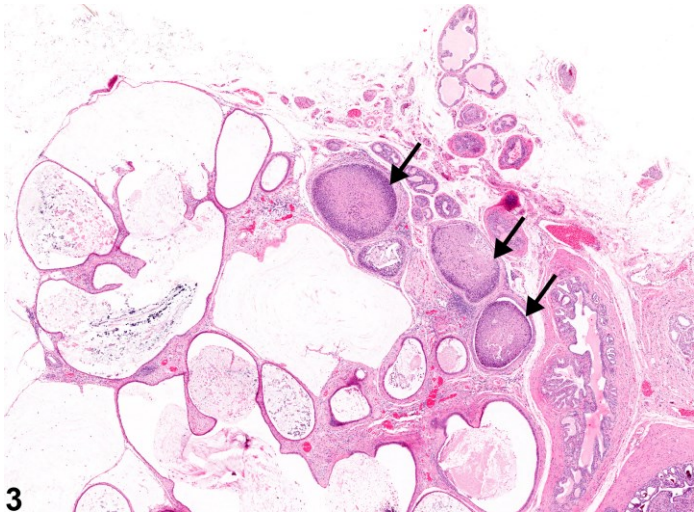
Prostate, Acinus – Dilation







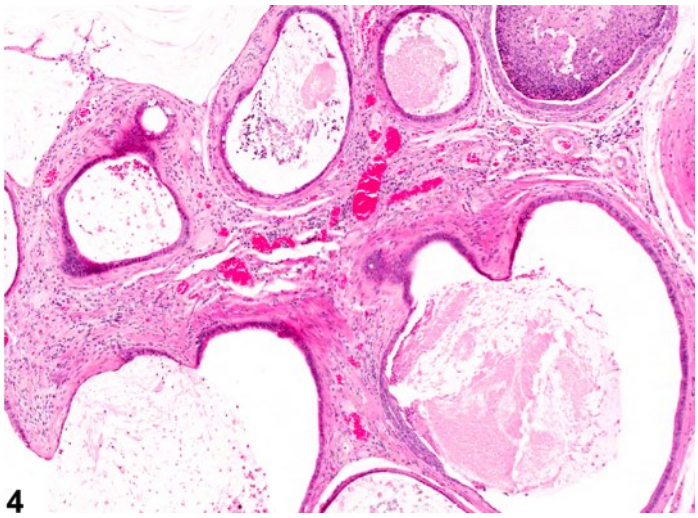
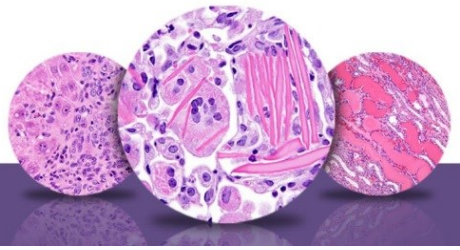


Figure Legend: Figure 1 Prostate, Acinus - Dilation. Acinar dilation in a male F344/N rat from a chronic study. **Figure 2** Prostate, Acinus - Dilation. Higher magnification of Figure 1. Acinar dilation in a male F344/N rat from a chronic study. **Figure 3** Prostate, Acinus - Dilation. Three dilated glands are filled with neutrophils and cellular debris (arrows) in a male F344/N rat from a chronic study. **Figure 4** Prostate, Acinus - Dilation. Higher magnification of Figure 3. Acinar dilation in a male F344/N rat from a chronic study.

Comment: Ectasia or dilation of the prostate is characterized by acini that are sometimes distended with secretory material and lined by attenuated epithelial cells (Figure 1, Figure 2, Figure 3, and Figure



4). There may be marked acinar enlargement, particularly with significant compression of surrounding unaffected acini and parenchyma, with the dilation appearing cystic (Figure 3 and Figure 4). Affected acinar secretory material can exhibit either a near normal staining reaction (Figure 1 and Figure 2) or can be poorly stained as in the quiescent gland shown in Figure 3 and Figure 4. Affected acini can be observed in any lobe and can involve either a part or the entire lobe. This is likely an age-related lesion and may be associated with interstitial inflammation.

Recommendation: Prostatic dilatation should be recorded and given a severity grade during histopathologic evaluation of prostate from toxicity studies. The affected lobe(s) should be identified if possible and indicated in the tissue identification (e.g., prostate, dorsolateral lobe, acinus - dilation, moderate). If paired lobes are both affected, the diagnosis should be qualified as bilateral, with severity based on the more severely affected gland.

References:

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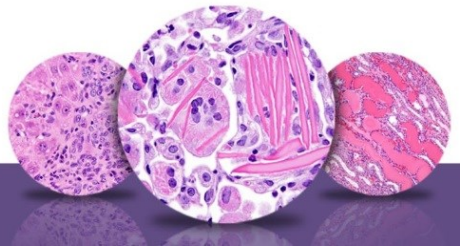

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