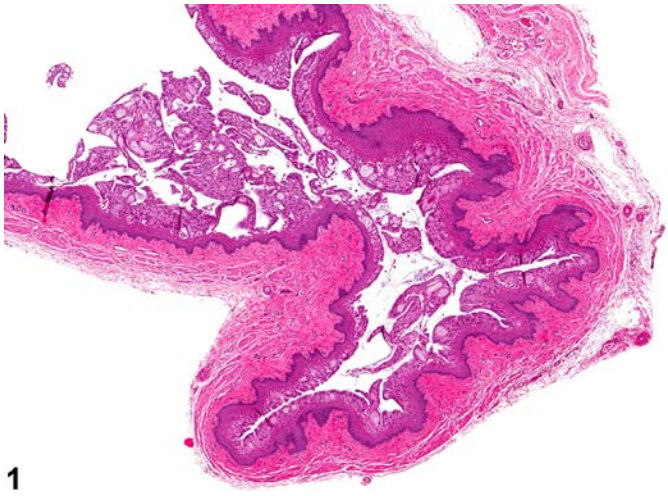
Vagina – Mucification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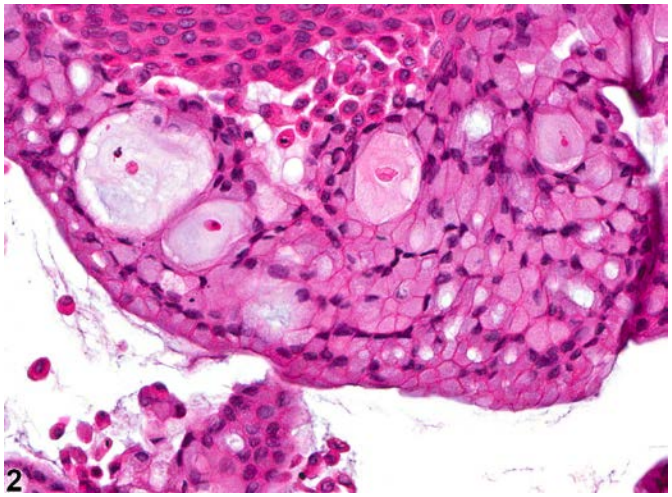
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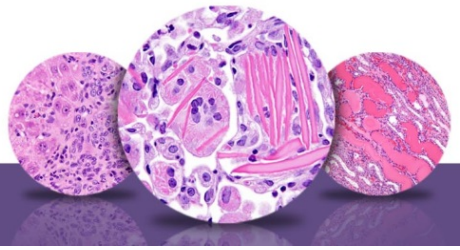
Figure Legend: Figure 1 Vagina - Mucification in a female Harlan Sprague-Dawley rat from a chronic study. The epithelium of the vagina is superficially mucified. **Figure 2** Vagina - Mucification in a female Harlan Sprague-Dawley rat from a chronic study (higher magnification of Figure 1). The vagina epithelium is composed of individual epithelial cells distended by a pale mucin-like material.

Comment: In general, vaginal mucification (Figure 1 and Figure 2) is induced by progesterone excess. Therefore, it occurs normally during proestrus, pregnancy, and pseudopregnancy. It is also seen with hyperprolactinemia, such as that caused by a prolactin-secreting pituitary neoplasm. It is characterized histologically by changes in the superficial epithelial cells of the vaginal mucosa, which become cuboidal or cylindrical with prominent vacuolation. The vacuolated cells contain PAS- and/or Alcian blue-positive material (mucin). In some cases, the mucification of the vagina may be a treatment effect. The degree of vacuolation, the thickness of the epithelium, and the lack of a band of keratinization between the epithelium and the mucified layer are indicative that the mucification is not part of a normal cyclical change.

Recommendation: Vagina - Mucification should be diagnosed and graded when it is not considered a component of normal estrous cyclicity, pregnancy, or pseudopregnancy, or if it is considered excessive in the opinion of the pathologist.



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