**Uterus – Adenomyosis**

**Figure Legend:**  
**Figure 1** Uterus - Adenomyosis in a female Harlan Sprague-Dawley rat from a chronic study. Glands are adjacent to the serosal surface of the myometrium (arrows). **Figure 2** Uterus - Adenomyosis in a female Harlan Sprague-Dawley rat from a chronic study (higher magnification of Figure 1). There are well-differentiated glands within the myometrium. **Figure 3** Uterus - Adenomyosis in a female Harlan Sprague-Dawley rat from a chronic study. Endometrial glands and stroma are evident within the myometrium. **Figure 4** Uterus - Adenomyosis in a female Harlan Sprague-Dawley rat from a chronic study. There are well-differentiated glands within the myometrium.

**Comment:** Adenomyosis (Figure 1, Figure 2, Figure 3, and Figure 4) is the presence of normal or hyperplastic endometrial glands and stroma that extend into the myometrium. Occasionally epithelial cells can extend onto the serosal surface of the uterus. Hormonal imbalance is a key factor. It is more common in some strains of mice (B6C3F1) than in rats and is more common in aged mice. It is important to differentiate adenomyosis from neoplasms. Adenomyosis has no atypia of the epithelial cells, which is a useful distinguishing feature. Adenomyosis may be differentiated from adenocarcinoma.
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by examining the epithelial cells and by the presence of normal uterine stroma. Malignant epithelial cells of adenocarcinomas exhibit cellular pleomorphism and often are multilayered. Adenomyosis should not be described as endometriosis, which is diagnosed only in primates (in endometriosis, the glands spread to the peritoneal cavity).

**Recommendation:** Uterus - Adenomyosis should be diagnosed and graded whenever present.

**References:**


National Toxicology Program. 2000. NTP TR-484. Toxicology and Carcinogenesis Studies 2-Butoxyethanol (CAS No. 111-76-2) in F344/N Rats and B6C3F1 Mice (Inhalation Studies). NTP, Research Triangle Park, NC.

National Toxicology Program. 2001. NTP TR-501. Toxicology and Carcinogenesis Studies of p,p'-Dichlorodiphenyl Sulfone (CAS No. 80-07-9) in F344/N Rats and B6C3F1 Mice (Feed Studies). NTP, Research Triangle Park, NC.
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