Uterus – Endometrial Stromal Polyp

Figure Legend: Figure 1  Uterus - Endometrial stromal polyp in a female Sprague-Dawley rat from a chronic study. A pedunculated polyp is present in the uterine lumen. Figure 2  Uterus - Endometrial stromal polyp in a female Sprague-Dawley rat from a chronic study (higher magnification of Figure 1). There is endometrial congestion adjacent to the polyp. Figure 3  Uterus - Endometrial stromal polyp in a female Sprague-Dawley rat from a chronic study. There is a polyp with an infarcted area. Figure 4  Uterus - Endometrial stromal polyp in a female Sprague-Dawley rat from a chronic study. There is superficial decidual alteration of a stromal polyp.

Comment: Stromal polyps are composed of areas of loosely organized stromal cells with blood vessels and occasionally a few trapped glands (Figure 1, Figure 2, Figure 3, and Figure 4). They are pedunculated masses that protrude into the uterine lumen. Stromal polyps are usually covered with
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simple epithelium. Occasionally, they become infarcted (Figure 3), and sometimes decidual alteration is evident (Figure 4). Ulceration, edema, and inflammation are also occasionally seen. Stromal polyps can arise from the cervix. They are relatively common in F344/N rats and B6C3F1 mice and tend to occur in older animals. They may represent localized areas of hyperplasia and have been associated with hormonal stimulation. Stromal polyps are considered to be preneoplastic lesions.

The number of glands within the polyps can vary, and some pathologists propose that those with numerous glands be classified separately as endometrial glandular polyps. The glands within such polyps may be hyperplastic. Until more is learned about these lesions, we recommend that all endometrial polyps be recorded as stromal polyps.

Vaginal polyps may extend through the cervix into the uterus and so must be differentiated from endometrial polyps. Vaginal polyps are composed of stroma but are covered by stratified squamous epithelium like the vagina.

It is important to differentiate polyps from epithelial neoplasms and malignant mesenchymal neoplasms (e.g., stromal sarcomas). Adenomas and adenocarcinomas may be exophytic and are distinguished from polyps by more complex epithelial structures, atypia, and/or pleomorphism. Adenomas are composed of focal accumulations of single layers of cuboidal to columnar cells with scant intervening stroma. Adenocarcinomas are masses composed of multiple layers of cells in glandular or papillary formations. The epithelium in adenocarcinomas is less differentiated than that of adenomas and displays moderate cellular pleomorphism and atypia. Stromal sarcomas are distinguished from polyps by greater cellularity and more prominent nuclei of the pleomorphic cells. Stromal sarcomas often invade adjacent uterine tissue.

**Recommendation:** Uterus - Endometrial stromal polyp should be diagnosed but need not be graded. These should be diagnosed as stromal polyps regardless of the number of glands within them. The prominence of the glandular component may be described in the pathology narrative. Changes within the polyp, including ulceration, edema, and inflammation, should not be diagnosed separately but should be described in the narrative.
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References:


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