

Case #8

Placenta percreta in a bitch at term: Near complete trophoblast penetration through the myometrium. D.H. Schlafer, Cornell University, Ithaca, N.Y.

Morphologic Description:

Within this section of uterus, there are masses of fibrin and acute hemorrhage overlying areas of endometrium whose normal architecture is markedly disrupted. The endometrium contains heavy lymphoplasmocytic cellular infiltrates admixed with a population of large cells that have open nuclei and indistinct cell borders. These cells have invaded through endometrium and inner circular layer of the myometrium. Endometrial glands are variably cystic, and some contain neutrophils. There are a few sites of mineralization. Scattered clusters of hemosiderin and hematoidin-laden macrophages are scattered throughout an eosinophilic, collagen-like matrix. Glandular and luminal epithelial cells have a highly vacuolated cytoplasm, typical in the canine for a response of these cells to progesterone.

Morphologic Diagnosis:

Placenta percreta;

Incomplete uterine involution with trophoblast persistence and proliferation, focal fibrino-hemorrhagic lymphoplasmocytic and mildly neutrophilic metritis with disruption of the myometrium.

Comment: This condition has many similarities to subinvolution of placenta sites. It has not been reported in the dog before.

References:

Kapoor DS, Tincello DG, Kingston RE.: Life-threatening obstetric haemorrhage in second trimester from a placenta percreta with raised alpha-fetoprotein levels. J Obstet Gynaecol. 2003 Sep;23(5):570-1.

Morken NH, Henriksen H. : Placenta percreta--two cases and review of the literature. Eur J Obstet Gynecol Reprod Biol. 2001 Dec 10;100(1):112-5.

Morison JE.: Placenta accreta. A clinicopathologic review of 67 cases. Obstet Gynecol Annu. 1978;7:107-23.