Clinical Snapshot

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CASE PRESENTATION

A 6-year-old intact female rabbit presented with open-mouth breathing and severe dyspnea. The rabbit also had severely cyanotic mucous membranes and reduced to absent lung sounds. Oxygen support was given immediately, and thoracic radiographs (A) were obtained. The rabbit was then placed in an oxygen cage, where it died before additional diagnostics or an examination could be conducted. Tissue samples from a necropsy (B and C) were submitted for histopathology. The rabbit was the only pet in the household.

1. What caused the lung lesions?
2. How common is this condition in rabbits?
3. How can this condition be treated?
4. What would you recommend to rabbit owners to prevent this condition?

(See page 51 for answers and explanations.)
1. Uterine adenocarcinoma. Histopathology of the lung tissue revealed metastatic neoplasia. Neoplastic cells in the lungs had obliterated almost all normal lung architecture, as seen in B and reported in the histopathology results. The primary tumor was found to be endometrial adenocarcinoma. Metastatic neoplastic cells had also invaded the myometrium and completely destroyed the ovaries (C), leaving no normal architecture for identification.

2. Uterine adenocarcinoma is the most common tumor type in rabbits. In female rabbits 5 to 6 years of age and older, the incidence of uterine adenocarcinoma is greater than 50%, although there is some debate on the exact percentage. Uterine adenocarcinoma is highly metastatic, spreading to the myometrium, peritoneal cavity, and then to the rest of the body hematogenously.

3. If uterine adenocarcinoma is detected early enough, ovariohysterectomy can be curative. Early clinical signs of uterine adenocarcinoma are hematuria and reproductive problems, such as decreased litter size, infertility, and stillbirth. When ovariohysterectomy is performed in a rabbit with these early signs, the peritoneal cavity should be examined and a liver biopsy performed. Once hematogenously spread metastatic disease is present, the prognosis is grave.

4. Owners should be encouraged to have female rabbits spayed when they are 4 to 6 months of age.