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Uterine Cancer in Rabbits

Basics

OVERVIEW

- Uterine adenocarcinoma is a malignant cancer of the uterus and is the most common type of cancer seen in rabbits.
- Uterine cancer occurs in up to 60% of females that are greater than 3 years old. An even higher incidence occurs in some breeds. There is no difference in the incidence of cancer in breeding vs. nonbreeding rabbits; age is the most significant risk factor.
- Cancer may be preceded by or occur simultaneously with inflammation of the uterus and other common uterine disorders (endometriosis, endometritis, endometrial hyperplasia, or endometrial venous aneurysms).
- Most uterine tumors are relatively slow growing but will eventually metastasize (spread) locally into the surrounding tissues within the abdomen, then to distant sites such as the lungs, brain, eyes, skin, bone, and liver.
- The average interval between onset of symptoms and death from metastasis is 12–24 months.
- Mammary cancer or mastitis is often found in rabbits with uterine cancer.
- Uterine cancers frequently bleed. Hemorrhage may become life threatening.



SIGNALMENT

- Seen in intact females only
- Highest incidence in females greater than 3–4 years old
- All breeds are at risk; highest incidence reported in tan, French silver, Havana, and Dutch breeds (up to 80% of intact females will develop cancer)

SIGNS

- Blood in the urine (called hematuria) is the most common symptom. The blood is not truly coming from the urine but originates in the uterus and is released when the rabbit bears down to urinate. Blood is usually not seen every time she urinates but is intermittent or cyclic and usually occurs at the end of urination; blood clots are sometimes seen.
- Vaginal discharge is common. Discharge can range from clear to thick, beige or blood tinged.
- Mastitis (mammary gland cysts) may be seen in up to 30% of rabbits with uterine cancer. Cysts are found in one or more mammary glands; cysts contain clear to cloudy fluid.
- Mammary gland cancer can also be seen.

- Increased aggressiveness—biting, attacking, or lunging at owners or other pets
- Breeding females may begin to have smaller litter sizes, increased numbers of stillborn babies, and may become infertile or abandon their litters.
- In females with late disease and metastasis—may be lethargic, have a decreased appetite, pale gums, or difficulty breathing if cancer has metastasized to the lungs.

RISK FACTORS

- Age is the greatest risk factor.
- There is no difference in the incidence of cancer in breeding vs. nonbreeding rabbits.
- All breeds are at risk; highest incidence reported in tan, French silver, Havana, and Dutch breeds (up to 80% of intact females will develop cancer)

TREATMENT

APPROPRIATE HEALTH CARE

- Hospitalization is needed for surgery and postoperative care.
- Frank bleeding from the vagina should be treated as an emergency. Blood transfusion may be indicated in rabbits with significant uterine bleeding.
- Treatment requires surgical removal of the diseased uterus. Generally, X-rays are taken prior to surgery to look for metastasis to the lungs.
- Assist-feed any rabbit that is not eating to avoid gastrointestinal disorders (GI stasis or bacterial overgrowth).

SURGICAL CONSIDERATIONS

- Surgery is required to remove the cancerous uterus.
- If the cancer has not metastasized, surgery is generally curative.
- Mammary tumors, if present, are often removed at the same time.

MEDICATIONS

Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered all-inclusive.

- Pain medications, such as meloxicam, carprofen, butorphanol, or buprenorphine, are used to control postoperative pain.
- There is no effective chemotherapy for uterine cancer in rabbits.

FOLLOW-UP

PATIENT MONITORING

- X-rays may be recommended every 3 months for the first 1–2 years following surgery, if metastasis is suspected. Not all metastases are visible at the time of surgery.
- Monitor the appetite and stool production. Some rabbits are painful after surgery and do not eat. Make sure that she continues to eat to prevent potentially dangerous gastrointestinal disorders.

PREVENTION/AVOIDANCE

- Ovariohysterectomy (spay) all nonbreeding rabbits; usually performed between 6 months and 2 years of age
- For breeding rabbits—recommend stop breeding and spay before 4 years of age, as this is when most tumors occur

POSSIBLE COMPLICATIONS

- Metastasis to other organ systems, resulting in death within 12–24 months.
- Life-threatening hemorrhage if tumors are actively bleeding

EXPECTED COURSE AND PROGNOSIS

- Excellent (cure) if ovariohysterectomy is performed prior to metastasis or mammary neoplasia
- Poor to grave if metastasis has occurred (5 months to 2 years to metastasize)
- Without ovariohysterectomy—metastasis, death in 12–24 months
- Associated cystic mastitis will resolve with ovariohysterectomy alone.

KEY POINTS

- Uterine cancer (uterine adenocarcinoma) is the most common type of cancer in rabbits.
- Uterine cancer occurs in up to 60% of females that are greater than 3 years old. An even higher incidence occurs in some breeds.
- To prevent cancer, spay all nonbreeding females.

Notes

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