

Transitional Cell Carcinoma in Cats and Dogs

A brief guide on disease progression including end-of-life symptoms

Common Signs of Pain

- Panting
- Lameness
- Difficulty sleeping
- Pacing
- Abnormal posture
- Body tensing
- Poor grooming habits
- Tucked tail
- Dilated pupils
- Licking sore spot
- Muscle atrophy
- Decreased appetite
- Vocalizing/yowling
- Reclusive behavior
- Aggressive behavior
- Avoiding stairs/jumping
- Depressed
- Unable to stand

Before your pet's condition becomes unmanageable or they are losing quality of life, it is important to begin end-of-life care discussions. Learn about [pet hospice care](#) and/or [euthanasia services](#) in your area so you are prepared for what lies ahead.

What is it?

Transitional cell carcinoma (TCC) is an aggressive, malignant cancer of the urinary bladder that affects both dogs and cats. Often times it invades into the urethra and/or ureters, causing obstruction of the urinary tract and disruption of normal urine flow. Animals usually present to their veterinarian for the inability to urinate or difficult urination, blood in the urine, or urinary incontinence. TCC is most likely to metastasize (spread) to local or regional lymph nodes, but can spread to any organ system via the bloodstream. It is commonly diagnosed by a combination of urinalysis and urine sediment cytology, ultrasound of the urinary bladder and urethra, and biopsy of the affected area.

How is it treated?

TCC is a difficult disease to treat surgically, but if the tumor is localized to a specific area, surgical resection with or without a tube cystostomy (permanent urinary catheter) may be an option. Most cases of TCC must be treated with chemotherapy or radiation due to the nature and location of the tumor. The two most common chemotherapeutic agents used for treatment of TCC are doxorubicin and piroxicam, both of which can be used in combination with other chemotherapeutic drugs. As cost is often a limiting factor in what treatments are viable, it is important to remember that none of the treatments for TCC are curative. Surgery and radiation therapies can often be expensive procedures, while chemotherapy can be a more affordable option.

What is the prognosis for transitional cell carcinoma (TCC)?

As with any disease, prognosis is dependent on the extent of the disease and the treatment chosen. With surgical intervention, in which an attempt was made to remove as much of the tumor as possible, there should be an increase in survival time. Chemotherapy, in addition to surgery, may improve survival time better still. Chemotherapy alone may also increase survival time. Regardless of treatment, if the tumor blocks the passage of urine, an unpleasant, painful death is imminent within a 1-2 days. Humane euthanasia should seriously be considered to alleviate suffering. A personalized treatment plan is important to slow the progression of TCC. Talk to your veterinarian regarding the best treatment protocol for your pet.

What symptoms can present as the disease progresses?

EARLY STAGES:

- Straining to urinate
- Urinary incontinence or frequent urination
- Bloody urine
- Licking the penis or vulva
- Decreased appetite
- Redness or swelling at the penis tip or vulva

**If your pet vocalizes due to pain or anxiety, please consult with your tending veterinarian immediately.*

LATE STAGES:

- Persistent early stages
- Vomiting
- Continued weight loss
- Painful abdomen
- Reclusive behavior
- Exercise intolerance
- Difficulty sitting and walking
- Constant pacing
- Urine scalding
- Possible constipation
- Anorexia

CRISIS:

Immediate veterinary assistance needed regardless of the disease

- Difficulty breathing
- Prolonged seizures
- Uncontrollable vomiting/diarrhea
- Sudden collapse
- Profuse bleeding – internal or external
- Crying/whining from pain*