## Dr. Mike Paul, DVM

Mike has more than 35 years of experience in companion animal veterinary practice and is a valued member of IDEXX's Pet Health Network team since 2013.

Neoplasia is the term for various types of abnormal growths caused by the uncontrolled division of cells. These rogue cells, called neoplastic cells, do not behave and are not controlled like normal cells; they may live longer and divide faster. According to Dr. Ananya Mandal, of News Medical, neoplasms can be non-cancerous (benign) or cancerous (malignant). The terms neoplasia, tumor and cancer are sometimes used interchangeably and may refer to various types of growths, including non-cancerous or benign tumors.

### How do neoplasms arise?

To understand how abnormal cells grow, you have to understand how normal cell growth is regulated. Throughout life, cells are continually being born and dying. When that process is disrupted, cells behave abnormally and abnormal tissues form.

# General types of neoplasia

- Benign— Benign neoplasms do not invade normal tissue, do not spread to other parts of the body and are rarely fatal unless they put pressure on a vital organ.
- Malignant
   — Malignant neoplasms (commonly referred to as <u>cancer</u>) invade and destroy tissue around them. They grow faster than the tissue around them and bits of the tumor, called metastases, can break off and spread to other parts of the body, forming other <u>tumors</u>.

#### Neoplasia and the kidneys

Renal lymphoma is the most common renal tumor in cats and often presents with sudden onset of poor kidney function, including acute kidney injury. Feline leukemia virus associated lymphoma seems to be declining, but possibly 14 to 50% of cats affected by lymphosarcoma are FeLV positive. Symptoms of neoplasia in cats include (4):

Abnormal swellings that persist or continue to grow

- · Sores that do not heal
- Weight loss
- Loss of appetite
- Bleeding or discharge from any bodily opening
- · Offensive odor
- Difficulty eating or swallowing
- · Hesitation to exercise or loss of stamina
- Persistent <u>lameness</u> or stiffness
- <u>Difficulty breathing</u>, <u>urinating</u> or defecating

Most forms of malignant neoplasia will ultimately result in weight loss, listlessness and reluctance to eat. Specific signs of cancer may vary with the portion of the body involved. For instance, gastrointestinal cancers may result in <a href="mailto:vomiting">vomiting</a> and <a href="mailto:diarrhea">diarrhea</a> while tumors of the nervous system may result in <a href="mailto:seizures">seizures</a>.

Early detection of cancer is always important to improve the odds of success if treatment is elected.

If you have any questions or concerns, you should always visit or call your veterinarian -- they are your best resource to ensure the health and well-being of your pets.

#### **Resources:**

- Kennard, Jerry. "What Is Cancer?"
  menshealth.about.com. 9 June 2015. Web. 06
  July 2015.
- Hayes, Alison. "Feline Lymphoma." In Practice (n.d.): n. pag.Inpractice.bmj. Bmj, 2006. Web.
- David Vail. "Feline Lymphoma and Leukemia." Small Animal Clinical Oncology fifth edition, p. 639.
- "Cancer in Animals." 10 Common Signs of Neoplasia in Small Animals.
   Ebusiness.avma.org. AVMA. Web.

### Cat Kidney Disease Articles

Chronic Kidney Disease: What Does Kidney Failure in Cats Really Mean?

Kidney Disease in Cats 101

<u>5 Things Vets Hate About Kidney Disease in Cats ... And How That's About to Change</u>















