

Surgical Oncology at CASE

Surgery is one of the most common modalities used to treat cancer in pets. In many cases, a well-planned and executed surgery can be curative. In other cases, surgery is more palliative in nature with the specific goal of alleviating discomfort. In all cases, whenever we consider surgery as a potential treatment option for your pet, our number one goal is to improve your pet's quality of life.

Before considering surgery, our surgical oncologist will have a consultation with you to evaluate your pet and discuss your concerns. During this consultation, the doctor will provide information about how the tumor behaves (tumor biology) and what this means for your pet and your family. They will then discuss the various ways in which surgery can be utilized and what other modalities may be considered. The doctor will also discuss the risks of surgery and what the recovery period will entail. The goal of this consultation is for you to walk away with a clear understanding of all your options, enabling you to make an informed decision about how you would like to proceed.

Cancer surgery is often very intricate, and it can involve multiple body systems. To better visualize a mass and its association with normal anatomy, advanced imaging is often performed preoperatively to facilitate surgical planning. This usually involves a CT scan, or occasionally an MRI, to allow the surgeon to visualize the mass in three dimensions. Having this information pre-operatively allows the surgeon to better plan for any additional measures that may be needed to maintain your pet's safety and optimize results.

If you decide to include surgery as a treatment for your pet with cancer, you want to make sure that the surgeon you choose is very experienced in cancer surgery to achieve the best outcome. This will result in a higher chance for a cure, a smooth recovery process with minimal post-operative pain and discomfort, lower rates of complications, and a superior cosmetic outcome.





How is a surgical oncologist different from a boarded surgeon?

A true veterinary surgical oncologist is a surgeon who has completed a surgical residency program and then gone on to perform an additional year of training to become an ACVS Fellow of Surgical Oncology.

During a residency program, surgeons focus on mastering anatomy, pathophysiology, and surgical techniques. During a surgical residency program, there is a requirement for the number of mass removals that must be performed to achieve credentialing, but there is no requirement to spend time being mentored by a medical oncologist or radiation oncologist. This is really a key difference between a boarded surgeon and an ACVS Fellow in Surgical Oncology. The ACVS Surgical Oncology Fellowship is a highly focused 1-year program that immerses the ACVS Diplomate in a training facility and requires time spent with medical and radiation oncologists to enable the surgeon to adopt a multidisciplinary approach to cancer care. Finally, there is also a case log that is required during the ACVS Surgical Oncology Fellowship program, which ensures Fellows perform a certain number of very highly specialized surgical oncology procedures to ensure mastery in these more challenging cases.

Currently, there are only 4 institutions worldwide that meet the strict requirements to train an ACVS Fellow in Surgical Oncology. There are fewer than 50 practicing ACVS Fellows in Surgical Oncology worldwide, underscoring the unique skill set and knowledge that an ACVS Fellow in Surgical Oncology can provide.

At the Pet Cancer Center at CASE, our surgical oncologist, radiation oncologist, and medical oncologist collaborate on all cases to provide exceptional cancer care for your pet and family. We are one of only a handful of dedicated pet cancer centers in the United States of America that can offer this true multidisciplinary approach.

What to expect at an initial consultation for your pet

An initial consultation will involve evaluation of your pet's previous medical records and any diagnostic tests that have already been performed. Our goal is to obtain these records before your consultation, so that the doctor can review them in advance.

When you first walk in, you will meet one of our

surgical oncology nurses. They will meet you and your pet, collect any remaining medical history, and a list of current medications. The nurse will then take your pet back to the oncology ward, allowing the doctor to perform a thorough physical examination. The doctor will then meet with you in the consultation room to discuss things further.

During this consultation, the doctor will provide information about how the tumor behaves (tumor biology) and what this means for your pet and your family. They will then discuss the different ways in which surgery can be utilized and what other modalities we may consider. The doctor will also discuss the risks of surgery, as well as what the recovery period will look like. The goal of this consultation is for you to walk away with a clear understanding of all your options, enabling you to make an informed decision about how you would like to proceed. You will also be given a financial estimate to ensure that you are aware of the costs involved in your pet's treatment.

What diagnostics may be performed the same day as my pet's initial consultation?

A full evaluation and consultation are necessary before proceeding with any diagnostics for your pet. We will discuss your pet's case and make recommendations. Some diagnostics, such as aspiration of the mass (cytology), lymph node aspiration/evaluation, x-rays, and ultrasounds, may be available the same day as the initial consult. Yet, this is not guaranteed. Advanced imaging (including CT scan and MRI) is not available the same day as initial consultation, as this requires extensive prior planning with other services in the hospital (such as anesthesia and radiology).

What are staging tests?

Staging involves assessing the extent to which cancer has advanced in your pet. Different cancers have different chances of metastasizing/spreading to other locations in the body. Different cancers also have different ways and places where they spread when they do. Therefore, different staging tests may include imaging of the chest or abdomen (this may involve a CT scan, x-rays, or ultrasound) or lymph node evaluation (typically performed by palpation





and obtaining a needle sample of cells). The higher the stage, the more progressed or advanced a cancer is. Staging tests are commonly performed before cancer treatments, as these results may influence what is recommended by the surgical oncologist or what is chosen by the pet owner. If cancer is more advanced, then certain definitive treatments are no longer available, and palliative (comfort) care is recommended. Staging tests are also commonly recommended following a treatment protocol to monitor your pet's cancer for any progression or concerns.

How do I prepare for surgery?

Once you decide to move forward with surgery, one of the surgical oncology nurses can help you schedule the procedure. Here are some common questions that we receive regarding preparing for surgery:

- a. When should I stop feeding my pet?

 All food should be withheld from 10 pm the night before surgery. A small amount of water after this time is OK, but it should be limited to 6 oz. or less.
- b. What should I do if my pet is on medication?

 Please administer your pet's medications as you normally would, up until 10 pm the night before surgery. If you have medications that you are giving your pet, please bring them with you the morning of surgery in the bottles that they were prescribed in. We cannot accept unlabeled medications in bags or containers. This will allow us to continue with these medications and ensure that you have enough pain medications for the post-operative period.

Please do not give your pet any medication the morning of surgery. There are some exceptions to this, which will be discussed during the scheduling of surgeries. Exceptions may include sedation medications, insulin, some heart medications, and some blood pressure medications.

c. What do I need to do to prepare my home for recovery?

The most important consideration for when patients come home is adequate confinement in a small space. The reason for this is to minimize tension on the incision and allow it to heal without complications. The reality of what this will look like for each family differs slightly. The

goal is to have your pet confined to a small area, around 10ft x 10ft - this can be a single room, play pen, or crate.

Stairs should be limited and only used to go outside for toileting purposes, or once per day to go up/down to a sleeping area. Stairs should otherwise be avoided. Similarly, we do not want your pet to jump on furniture during this time.

Finally, most patients require an Elizabethan collar (plastic collar worn around the neck) to prevent them from traumatizing their incisions. There are a few scenarios where a workaround can be made, but it is often easiest and safest to leave the provided collar on until the 2-week recheck.

What should I expect on the day of surgery?

The day before surgery, you will be sent an anesthesia consent form and some other final paperwork to be signed before the procedure to your email. We can also arrange to have hard copies available for signing if needed. The low end of the cost estimate will be left as a deposit before the procedure, with either a refund or additional payment to be made upon discharge.

Patients are usually dropped off between 7 am - 8 am the morning of surgery. At drop-off, you will bring any currently prescribed medications that you are administering to one of our nurses and answer a series of short questions before dropping off your pet. This typically takes only 5-10 minutes.

Once patients are admitted to the hospital, a physical examination is performed and they are placed in a comfortable run. We then give patients some pre-anesthesia drugs to help reduce their anxiety and provide some pain relief. An intravenous catheter is placed, and fluids are commenced. We have a board-certified anesthesiologist who oversees all anesthetic plans within the hospital. Once your pet's surgery has finished, the doctor will call you to give you an update and let you know details regarding anesthesia and the procedure.

If your pet is having an outpatient procedure performed, then they can usually be picked up between 3 and 6 pm. This will be coordinated with you on the day of surgery, depending on how they recover. If they are having a procedure that requires an overnight stay, the doctor will call the following morning to provide an update after her morning assessment and share a plan with you.





At discharge, one of our surgical oncology nurses will review written instructions on how to care for your pet and what to look for during the post-operative period.

When do I bring my pet back for a recheck?

Most rechecks are performed around 12-14 days post-operatively. If your pet has a closed suction drain placed or a special bandage placed, then these are changed 3-5 days after surgery. The exact details of those changes will be shared with you during the consultation and throughout the recovery process.

Can my pet be on a raw diet if receiving treatment at CASE? What diet is recommended?

No. Our Oncology service has a strict policy prohibiting raw diets during cancer therapy. This is due to the greatly increased risk of exposure to harmful bacteria, both for pets eating raw diets and for people who interact with them. Out of concern for both our patients' and staff's safety, we ask that you not feed a raw diet while your pet is a patient at CASE. There is no nutritional difference between raw and cooked food, and no proven benefits have been found in raw food.

Our patients often undergo significant changes by the time they come to see us. We do not want to "rock the boat" when patients are going through cancer treatments by changing their food, which may also lead to gastrointestinal upset. Many changes can make it difficult to determine the cause of why a patient may not be feeling well or experiencing symptoms such as diarrhea or vomiting. We ask that our patients continue on their current food (unless raw or other concerns). Recommended foods are produced by companies that employ nutritionists and maintain good quality control measures for their pet diets. This includes food brands such as Purina, Royal Canin, Hill's, lams, Eukanuba.

What are our thoughts on herbs, supplements, alternative therapies, CBC, etc., for my pet?

We understand and respect that these therapies may play a role in supporting the quality of life for cancer patients. Unfortunately, we do not have data or science backing for many alternative or holistic therapies for pets with cancer. Although these products are "natural," that does not mean they are free from causing any side effects or interactions with other drugs. Overall, we do not have a lot of data and information regarding these products and how they may benefit (or harm) a pet with cancer.

The National Animal Supplement Council (NASC) does quality control of suppliers of herbs and supplements; therefore, you may look for this label when purchasing products for your pet. You may also view these products on their website (https://www.nasc.cc/members/).

Does my pet's primary veterinarian still play a role in my pet's care following a diagnosis of cancer?

Yes. We see ourselves as a team with your pet's primary care veterinarian. Although pets may develop cancer, other ongoing non-cancer care will need to be continued with their primary veterinarian. This may include concurrent conditions (such as kidney disease) or ongoing preventative care.

How do I contact my medical care team if I have concerns regarding my pet after surgery?

If you have concerns about your pet, then the best thing to do is to call the hospital (303-545-2273). We have doctors and technicians working 24/7 who can help answer your concerns.

If there is a non-urgent question, then you are welcome to email the oncology department: (oncology@coloradoanimalspecialty.com). Please note that this email is only accessed Monday - Friday, 9 am - 5 pm.

