

Panniculitis (Steatitis)

What is this “tumor”?

A “tumor” is a lump. Not all are cancerous. **Panniculitis** is usually visible as a lump but it is an inflammation of the subcutaneous fatty tissue and is not cancerous. **Steatitis** is a similar inflammation of fatty tissue but occurs in any part of the body.



Image courtesy of Jan Hall,
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What do we know about the cause?

Most of these lesions are due to trauma, especially in younger animals and when solitary. Classic sites are on the flanks of dogs and the abdomen of cats. In cats, many are due to bite wounds from fighting. A few, in both dogs and cats, are idiosyncratic injection reactions. A few are benign fatty tumors (**lipomas**) that have become inflamed.

Other causes include infections, immunological reactions, steroid treatment, disease of internal organs such as the pancreas or liver, poor nutrition and diseases that affect the blood supply. These causes are much rarer than simple trauma so are usually only considered when there are multiple sites or recurrences of panniculitis or steatitis, or other signs of disease.

Is this a common problem?

This is a common problem in cats but less so in dogs.

How will this problem affect my pet?

The most obvious effect is a lump. This may ulcerate, bleed, become secondarily infected or have physical effects on the surrounding structures. As the tissue is often dying, toxic substances may enter the blood stream so your pet may be depressed or have a fever.

How is this problem diagnosed?

Clinically, with the history of rapid appearance and sites, this condition is often suspected.

Accurate diagnosis relies upon microscopic examination of tissue.



Various degrees of surgical invasion may be needed such as needle aspiration, punch biopsy and full excision. Cytology is the microscopic examination of cell samples. This is used for rapid or preliminary tests but is not as accurate as histopathology, which is done at a specialized laboratory by a veterinary pathologist. The piece of tissue may be a small part of the mass (biopsy) or the whole lump but only examination of the whole lump will indicate whether it has been fully removed.

Histopathology also rules out other diseases and cancers. There are some cancers that resemble this condition clinically. In cats, early removal of abdominal lumps is important because most mammary tumors are malignant and early excision is important in survival time. ‘Feline ventral abdominal angiosarcoma’ is a malignant tumor with

a “bruised” appearance. Distinguishing these and some other types of malignant tumors of vessels and fat can be difficult in both dogs and cats.

What types of treatment are available?

The most common treatment is surgical removal of the lump. Other treatments include draining liquid, which may be infected, and antibiotic therapy for secondary infection.

Can this problem disappear without treatment?

The inflammatory cells are a reaction to damage or death of the fatty tissue. Whether they are successful in removing the damaged tissue depends on the size of the lump, number and activity of the cells and how quickly fibrous tissue surrounds and replaces the dead tissue. There is often a permanent scar with loss of blood supply to residual, central dead tissue. This causes further problems unless it is removed surgically.

A few cases of panniculitis are due to primary infection by bacteria or fungi and removal is needed to cure them.

How can I nurse my pet?

Preventing your pet from rubbing, scratching, licking or biting the lump will reduce itching, inflammation, ulceration, infection and bleeding. Any ulcerated area needs to be kept clean.

After surgery, the operation site similarly needs to be kept clean and your pet should not be allowed to interfere with the site. Any loss of sutures or significant swelling or bleeding should be reported to your veterinarian. If you require additional advice on post-surgical care, please ask.



How will I know if the problem is permanently cured?

Surgical removal is usually a complete cure. If the lump is sent for histopathological diagnosis, the diagnosis can be confirmed, the completeness of excision assessed and other diagnoses ruled out.

If the problem in your pet is due to one of the rare non-traumatic causes, further lumps or recurrence in the same site may be rapid (days to weeks). More tests may be needed to find the cause and assess how the underlying problem can be cured.

Are there any risks to my family or other pets?

No, this disease is not transmitted from pet to pet or from pets to people.