

## BASIC INFORMATION

### Description

Lipomas are benign tumors that arise from the growth of fat cells. They are more common in overweight, middle-aged to older dogs. The breeds most often affected are the Labrador retriever, Doberman pincher, miniature schnauzer, cocker spaniel, dachshund, and Weimaraner. Although only one tumor may be present, more often several of them develop over time.

### Cause

The exact cause is unknown. It is not well defined what impact obesity has on these tumors, but in both conditions the numbers of fat cells in the body are increased.



### Clinical Signs

Lipomas are well-defined, oval or round growths that can be felt under the skin (subcutaneous area). They usually feel smooth, soft or rubbery, and can be easily moved around under the skin. Most occur on the trunk (body) of the dog, especially under the chest. They can also occur on the legs and occasionally in the neck region. Lipomas start out small but can become quite large (several inches in diameter). Most lipomas do not cause any clinical signs and are discovered by petting or feeling the dog. Some lipomas can cause problems with walking if they develop in areas where the legs join the body, especially if they become very large.

In rare instances, lipomas can develop in areas other than the skin, such as in the abdomen, around the heart, or behind the eye. If lipomas develop in these areas, they may cause serious clinical signs.



### Diagnostic Tests

Lipomas can mimic other, more malignant tumors, so obtaining a sample with a small needle (fine-needle aspiration) can be helpful in identifying them. When the sample is examined under the

microscope (cytology), oily material is seen, and often fat cells can be identified. Biopsy of the tumor confirms that it is composed of only fat cells and that the tumor is benign. Malignant lipomas (liposarcomas) are rare but can occur.

## TREATMENT AND FOLLOW-UP



### Treatment Options

Many lipomas require only monitoring (once the tumor is identified as a lipoma by cytology), since most of them are benign and slow growing. However, tumors that are more deeply attached, are rapidly growing, or are very large are usually removed. Some lipomas penetrate or invade deeply into the surrounding muscle tissues. These are called *infiltrative lipomas*, and they can cause more problems and be more difficult to remove. This type of lipoma may recur after surgery, whereas recurrence is uncommon for most other lipomas. Strict weight control can be tried to prevent the development of more lipomas. Some lipomas shrink in size with weight loss, but others do not change much.



### Follow-up Care

Monitoring the size and growth rate of any bump on a dog is important and should be done at regularly scheduled intervals (for example, every 3, 6, or 12 months), depending on the advice of your veterinarian. Report any changes in tumor size, shape, or firmness and any changes in the skin overlying the tumor to your veterinarian. If other lumps or bumps develop, schedule a recheck with your veterinarian. Regular monitoring is also indicated for dogs on a weight-reduction program.

### Prognosis

Prognosis is generally good with benign lipomas. Infiltrative lipomas often recur and cause destruction of underlying tissues.