



## **SOLAR INDUCED SKIN CANCERS IN DOGS**

Dogs with short-hair and light pigmentation such as Dalmatians, whippets, Italian Greyhounds, pitbulls and bull dogs may develop tumors associated with sun exposures. The most common site on the body is the ventral abdomen, inner thighs and preputial skin where the hair is often sparse. Lesions may be single or multiple. There are 3 common tumor types: Hemangiomas, hemangiosarcomas, and squamous cell carcinoma.

Hemangiomas and hemangiosarcomas cannot be differentiated on appearance alone, a biopsy is necessary to confirm the diagnosis. Both may appear as red or dark purple plaques or raised nodules. These tumors may occasionally bleed. Lesions do not invade into the subcutaneous tissues initially, but may behave aggressively if not addressed. Metastasis of hemangiosarcomas, when it occurs, happens many years after initial diagnosis unlike other forms of hemangiosarcoma. Hemangiomas are benign and do not metastasize.

Squamous cell carcinomas may present as a raised nodule, but most often occur as areas of ulceration. They are most often misdiagnosed initially as allergic reactions or skin infections but do not respond to appropriate therapy. A biopsy is necessary to confirm. Squamous cell carcinomas are locally invasive and can involve large areas of the skin. They rarely metastasize.

### Treatment

Surgical removal is recommended for larger lesions and to confirm the diagnosis. However, surgical removal of all lesions is not usually practical. Small lesions are most often addressed with cryotherapy (freezing). It is not unusual for some patients to require cryotherapy of new lesions every 4-6 months.

Immunotherapy such as topical retinoids and Aldara, a topical immunotherapy used for genital warts in people, may have some efficacy in treating solar induced skin tumors in dogs.

Antioxidant vitamins such as Vitamin A, Vitamin E, and Selenium as well as omega 3 fatty acids may help improve the health of the skin.

### Prevention

Once solar induced skin cancers have occurred it is imperative to limit sun exposure in your dog. It is best not to let your dog "sun-bathe". Keep your dog indoors as much as possible during the hours between 10 am-4 pm when the sun is hottest. Application of an infant or child's sunblock to sensitive areas can help. Sun suits for dogs are available on [designerdogwear.com](http://designerdogwear.com).