LePar Animal Hospital 3811 W. 95th St. Evergreen Park, IL 60805 708-423-3200

What is juvenile cellulitis?

Juvenile cellulitis, also known by the name "puppy strangles," is an uncommon skin condition of young dogs. Juvenile cellulitis most commonly affects young puppies, between one and six months of age. In rare cases, juvenile cellulitis can also affect young adult dogs and has been reported in dogs up to four years old.

The underlying cause of juvenile cellulitis is unknown. This condition is currently regarded as idiopathic, meaning that its cause is currently unknown. The condition does appear to have an immune-mediated component, meaning that the puppy's immune system is attacking the puppy's own skin, but the underlying cause of this immune attack has not yet been identified.

Juvenile cellulitis appears to have a possible hereditary component. Certain families of dogs are more likely to develop juvenile cellulitis, and Golden Retrievers are over-represented as a breed.

What are the clinical signs of juvenile cellulitis?

The first sign of juvenile cellulitis is usually an acute (sudden) swelling of the face and muzzle. This generalized swelling is typically followed by the development of raised bumps and pustules (pus-filled bumps or pimples) over the face, muzzle, and ears. Over time, these pustules may rupture and crust over, resulting in heavy scabbing across the affected areas.

Although the skin lesions associated with juvenile cellulitis are often first noticed on the face, they may spread across the body if the condition is not treated promptly. The paws, anus, and vulva may be involved.

You may also notice swelling under your dog's jaw. In dogs with juvenile cellulitis, the submandibular lymph nodes (located on either side of the neck, under the jaw) often become swollen and tender. As the disease progresses, these lymph nodes may rupture and drain, leaving oozing tracts and openings in your dog's skin.

Typically, dogs affected with juvenile cellulitis do not feel well. Approximately half of affected dogs are lethargic, with decreased energy levels. Affected dogs often experience a loss of appetite. They may feel warm to the touch, because affected dogs often develop a fever. Less commonly, juvenile cellulitis may lead to limping and joint pain.

How will my veterinarian diagnose juvenile cellulitis?

"Your veterinarian will first perform a number of tests to rule out other, more common, skin conditions."

Before diagnosing juvenile cellulitis, your veterinarian will first perform a number of tests to rule out other, more common, skin conditions. Juvenile cellulitis is uncommon and therefore it is not often initially considered for puppies presenting to the veterinarian for skin disease. Skin scrapings will likely be performed to rule out mange, and fungal cultures may be used to rule out ringworm, because mange and ringworm can both have an appearance similar to juvenile cellulitis.

After these conditions are ruled out, your veterinarian will perform further testing to look for less-common causes of skin inflammation. A skin cytology may be performed to examine the cells on the surface of your dog's skin. This test involves taking a sample from the surface of the skin (using a slide that is pressed onto the skin or a piece of acetate tape that is used to collect surface cells/debris) for examination under a microscope. Additionally, your veterinarian may recommend a skin biopsy, in which a full-thickness skin sample is collected and submitted to a laboratory for examination. Skin impressions and biopsies may reveal a specific type of inflammation that can be used to identify juvenile cellulitis.

How is juvenile cellulitis treated?

Juvenile cellulitis is an immune-mediated disease. Therefore, treatment of juvenile cellulitis relies upon suppressing the immune system, to stop the auto-immune reaction. The most commonly used drug for this condition is prednisone, which is typically administered over a period of several weeks and gradually tapered. Side effects of prednisone include increased thirst and urination, as well as an increased appetite. Other immunosuppressive drugs may be used in place of prednisone.

"The most commonly used drug for this condition is prednisone, which is typically administered over a period of several weeks and gradually tapered."

Affected dogs are also frequently treated with antibiotics. Although bacterial infection does not cause juvenile cellulitis, secondary bacterial infections often develop in the open skin lesions. Treating these secondary infections with antibiotics relieves some of the inflammation associated with this condition, increasing your dog's comfort and making it easier to control the immune-mediated response.

What is the prognosis for juvenile cellulitis?

Most cases of juvenile cellulitis resolve fully with prompt treatment. Typically, one course of steroids is adequate to resolve the condition. If the condition recurs as steroids are tapered, longer-term therapy may be required, but this is uncommon.

If severe lesions develop, especially around the eyes, permanent scarring may develop. This scarring is cosmetic in nature and does not affect the dog's quality of life.

This client information sheet is based on material written by: Catherine Barnette, DVM © Copyright 2017 LifeLearn Inc. Used and/or modified with permission under license.