

## Information for Clients

### **PYODERMA**

#### **Introduction**

Pyoderma, literally, “pus in the skin” is the term applied to bacterial skin infections. Pyodermas may be superficial (involving only the epidermis, the topmost layer of the skin and/or the hair follicle, "folliculitis") or deep (involving the deeper skin layers.) Superficial pyoderma is extremely common in dogs, and less commonly, may be seen in cats. The bacteria most often implicated in pyoderma is called *Staphylococcus intermedius*. *S. intermedius* can be found on normal skin in very small numbers, and only causes infection when conditions allow it to overpopulate the skin environment. Most often pyoderma is secondary to an underlying cause. Underlying causes may include skin parasites, allergic skin disease, various internal diseases or hair follicle disorders. Any of these underlying causes can effectively alter the skin’s immune system or microenvironment and allow the infection to be established. When an underlying cause can be identified, treating that problem as well as the actual skin infection will often lessen or eliminate the recurrence of the pyoderma.

#### **Clinical Signs**

The primary skin lesions of pyoderma are pustules, papules (a "rash") and epidermal collarettes (circular areas with scale around the edge). The skin is often red and inflamed. These initial skin lesions are transient and leave behind crusts (scabs), and possible areas of hair loss. Chronic or recurrent pyoderma will often cause the skin to thicken and pigment. Pyoderma is often itchy, and can be painful. Self-trauma in the form of scratching, licking or chewing will increase redness and hair loss. Deep pyoderma has more severe lesions. The lesions may appear as raised nodules or malodorous draining tracts. Pyoderma may occur on any part of the body, but is most often noted over the abdomen, groin and in the “armpit” area.

#### **Diagnosis and Treatment**

Diagnosis of pyoderma is based on the physical exam findings, microscopic evaluation of samples obtained from the skin lesions, and response to appropriate antibiotic therapy. Sometimes a skin biopsy or blood tests may be necessary to rule out other disease processes or identify an underlying cause. Treatment varies with the severity of the pyoderma. Only certain antibiotics are effective in treating skin infections, and these antibiotics may need to be given for several weeks to months to completely clear the infection. Often the infection may look better, but still be present. Therefore, it is important to continue the full course of antibiotics as directed by the veterinarian. Additional treatment with an antibacterial shampoo, rinse or lotion is usually indicated. For chronic or recurrent pyoderma, long term antibiotic therapy, “pulse therapy” with antibiotics given only a few days each week or other maintenance treatment may be necessary.