Ask A Vet: Cellulitis - A Common and Serious Problem

Sunday, September 4, 2016

Dear Dr. Weldy's,

Recently my pony's leg was swollen and painful. She wouldn't put weight on the leg and we were afraid it was broken. We called for our veterinarian and discovered it was a case of cellulitis from a small puncture wound above the ankle. After intravenous antibiotic treatment and follow-up antibiotics and anti-inflammatory drugs she made a complete recovery. How common is this and why is it so sudden and painful?

Dear Reader,

You have described a very serious swelling of your pony's leg that your quick action in getting veterinary attention may have saved her from permanent complications or even death. All animals are prone to cellulitis because small punctures in the skin from scratches or bites are common. They often go unnoticed until they are infected with bacteria and start spreading rapidly in the tissues under the skin. In even a few hours the infection can spread and swell enough to actually split the skin open or cause extreme pain and fever. Unfortunately if left untreated the infection can enter the bloodstream and result in septic shock and even result in the death of the animal.

Horses and cattle with tight skin below the hocks and carpus often quickly become non weight bearing on the leg and sometimes even an x-ray is needed to determine that no fracture has occurred. Cats and dogs are often scratched or bitten around the face and neck and the bacterial contamination results in very painful causing depression, fever, and loss of appetite. Sometimes in horses the severe septic cellulitis can cause laminitis (founder) which requires medical management for up to a year.

Streptococcal and Staphylococcal bacterial cellulitis are the most common and can result in toxic shock in a matter of a few days. Localized heat, pain, non weight bearing, fever, and depression occur quickly. Clostridial cellulitis can be even more rapid and deadly and can result from contaminated intramuscular injection sites. Sometimes severe soft tissue trauma can rapidly develop into clostridial cellulitis and gas forming clostridia can bubble up the skin that crepitates when touched. Surgical intervention is sometimes needed to relieve the pain and pressure.

Treatment of cellulitis requires antibiotic therapy that your veterinarian recommends depending on the bacterial cause and location of the infection. Often aggressive intravenous antibiotic and anti-inflammatory by your veterinarian is needed to deal with this problem and shorten the duration of the swelling and pain. Massage of the area is contraindicated in the early stages of cellulitis but may be needed once the infection is resolved to reduce the swelling that remains in the later stages of the disease. Sometimes the entire limb becomes grossly swollen and without aggressive treatment will permanently remain. Fractures and compound fractures complicated by cellulitis are particularity challenging due to bone infection along with the soft tissue.

In conclusion you were very wise in contacting your veterinarian when you did to prevent much bigger problems. Hopefully this has answered your questions about a topic that is complicated and often very serious.

-Dr. Jerry Sellon