Getting a Jumpstart on Joint Infections

Infected joints can be scary and cause stress, but early aggressive treatment offers the best chance for a full recovery. As with all emergencies, prevention is the best medicine. Avoid infected joints with treatments that include pain medications, sterile bandaging of the limb, and stall rest.

Perform the regional limb perfusion daily for the first three to five days of treatment. Additional antibiotic given daily or several times daily (depending on your veterinarian's preference and what the bacterial culture shows is effective). We can also perform a regional limb perfusion of antibiotics. This is a method to get high tissue concentrations of drug locally to the affected area, with lower (and safer) concentrations to the rest of the body. We apply a short tourniquet to the limb above the infected joint and inject an antibiotic solution into a vessel below the tourniquet. We then keep the tourniquet in place, flush the joint through the tourniquet and antibiotic solution, and then let the antibiotic solution run down the limb. We have to perform the regional limb perfusion daily for the first three to five days, just as in the hospitalized patient.

If referral for arthroscopic surgery is not possible, then our option on the farm is to aggressively flush the joint however we can, using sterile needles on opposite sides of the structure, for "through and through" lavage. We'll attach a pressurized bag of sterile saline to one of the needles so the fluid flows through the "out" needle fairly quickly. Depending on the rate of flow, we may use a second needle or in the recumbent horse with short tubes (cannulas) to improve the flush. This can be done in the sedated standing horse in some cases, but we can sometimes make small portal incisions directly into the joint and introduce small metal instruments to remove inflammatory debris. He or she will also flush sterile fluids (usually saline) through these portals to clean up the infection during surgery. Once flushed thoroughly, the veterinarian will often chase the sterile saline with a dilute solution of a powerful broad-spectrum antibiotic directly into the joint. The veterinarian will perform joint lavages daily for at least the first three to five days of treatment.

An infected synovial structure will be on your veterinarian's list of possibilities, especially if there is a cloudy, or thin fluid can indicate infection or inflammation. The sample's appearance. Normal synovial fluid is light yellow but clear and fairly thick. Darker, whitish, cloudy, or thin fluid can indicate infection or inflammation.

Before sending the sample off to the lab for culture, cell counts, and microscopic evaluation, which are all important tests to run, your veterinarian can get an immediate idea of what's going on by the sample's appearance. Your veterinarian might insert needles into the infected joint and flush it with sterile saline. Flushing and treating the joint directly is a good start, but we can't stop there. We also have to provide systemic antibiotics to help the body clear the infection. Generally that means a powerful intravenous antibiotic therapy will continue for at least three to five days, and we may have to use intramuscular or intra-articular treatments if the infection is going to be a bit more resistant.

However, just as with all antibiotics, we have to be careful not to overuse them. There's no point in contaminating the joint space with bacteria if there's already enough in there that are already resistant to that drug. After the first few days, we will switch to a different antibiotic, which could be an oral antibiotic or even an injectable one. We may then use an injectable antibiotic for a week or two, and then we may go back to oral antibiotics if the infection is going to be that much easier to treat. If we need to use repeated injectable antibiotics, we may have to use a different drug, depending on what the bacterial culture shows is effective.

Unfortunately, this fluid is an excellent breeding ground for bacteria, as well, so infections can become quite serious. Many of these structures are near the skin surface, so even a superficial wound can introduce enough bacteria into the joint or tendon sheath to cause a severe infection days later. Once your horse has been diagnosed with an infected joint, the treatment will usually involve a combination of systemic and local antibiotic therapy, along with joint lavage, debridement, and rest.

Once tentatively diagnosed, aggressive, multimodal treatment must begin immediately if financially feasible. Early intervention is crucial to reduce the risk of joint damage and improve the chances of recovery. Treatment protocols may vary depending on the specific infection and the stage of the disease. Your veterinarian will manage the case based on the information gathered during the initial evaluation and subsequent diagnostic tests.