



NEBRASKA EQUINE VETERINARY CLINIC

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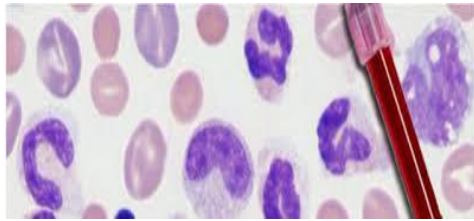
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Three Common Equine Diagnostics Michael Thomassen, DVM

Wouldn't it be great if our horses could talk to us? I know that I would have several questions for my gelding. As a veterinarian, I would love to ask my patients questions about where their pain is coming from, how long they have been sick and how sick they really are. Since we can't talk with our patients, we need to perform tests to figure out the answers to these questions. I will discuss the value of diagnostics and a few of the more common diagnostics that we perform.

Blood work



A fever, nasal discharge, cough, not acting right and diarrhea are a few of the most common illnesses that we encounter. To help us determine the severity of illness, if any internal organs such as the liver, kidney, etc. are involved, we will often obtain a blood sample and perform a complete blood count (CBC) and chemistry profile. A CBC determines the number or concentration of red blood cells and white blood cells. A chemistry profile gives us information about kidney and liver health, electrolytes, muscle abnormalities and protein levels.

Diagnostic Nerve or Joint Blocks

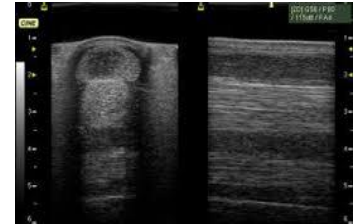
I personally am jealous of human orthopedic surgeons. Their patients are able to tell them that their right knee or ankle or shoulder is painful. The surgeon then orders radiographs, MRI or CT imaging to investigate that area and make a diagnosis about the injured structure. A treatment plan and prognosis can then be formed. Lameness exams are a very common task that we perform. Often, there is not any noticeable heat, swelling, or pain on palpation to indicate to us where the lameness is coming from. We turn to local anesthetic, commonly known as a nerve or joint block, to help us identify an area that is causing the lameness. Think about when we go to the dentist for a filling, or root canal. They give us an injection of local anesthetic. We are still able to talk and move our jaw but we can't feel any pain. That's the idea behind diagnostic blocks in horses. We desensitize an area and then watch the horse move again. If the lameness improves significantly or goes away after the block, then we have determined the area of pain. If the lameness does not improve, then we move a little higher on the leg. Sounds easy, right? Sometimes it is straightforward but other times, it is not. Multiple leg lamenesses or more than one areas of pain on the same leg are commonly encountered and can make identifying the painful area difficult.



Radiographs and Ultrasound

Radiographs (x-rays) and ultrasound are two tools that we use to gain information about internal structures. Radiographs are used very frequently in lameness exams. They can provide great details about bone and joint health. Digital radiographs provide great detail and allow us to obtain them in the field.

Ultrasound is very versatile. It can be used to examine tendons and ligaments on the leg, help us visualize internal abdominal structures such as the liver, kidneys, ovaries, uterus, or even be used to look at the surface of the lungs or fluid in the chest. The diagnostic quality of both of these tools has improved greatly in recent years.



One important thing to remember about diagnostics is that there is not one perfect test. We often have to perform multiple diagnostics to find the answer. Think about when you lose your keys. You may look on the kitchen counter, nightstand, dresser, and bathroom vanity before you finally find them on the arm of the couch. You found the keys by eliminating, one by one, other possible hiding spots. In veterinary medicine, we often do the same thing. It may take multiple tests to finally provide a diagnosis. We will have to perform these diagnostics until every horse can talk like Mister Ed.