Joint Injections and Medications Used In the Equine Athlete

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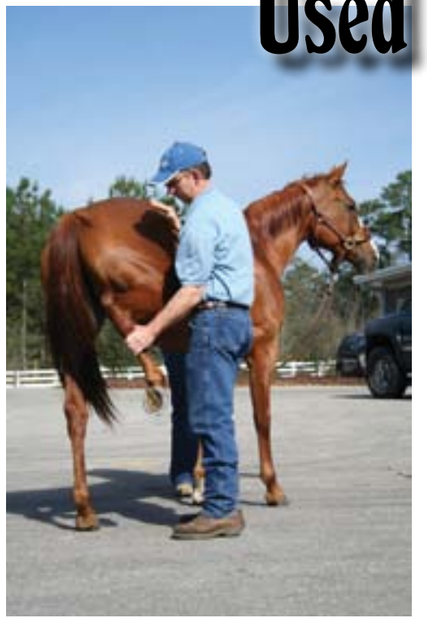


Excellent diagnostics, including a thorough physical examination, are critical to treating and preventing lameness versus random treatments done without any scientific data.

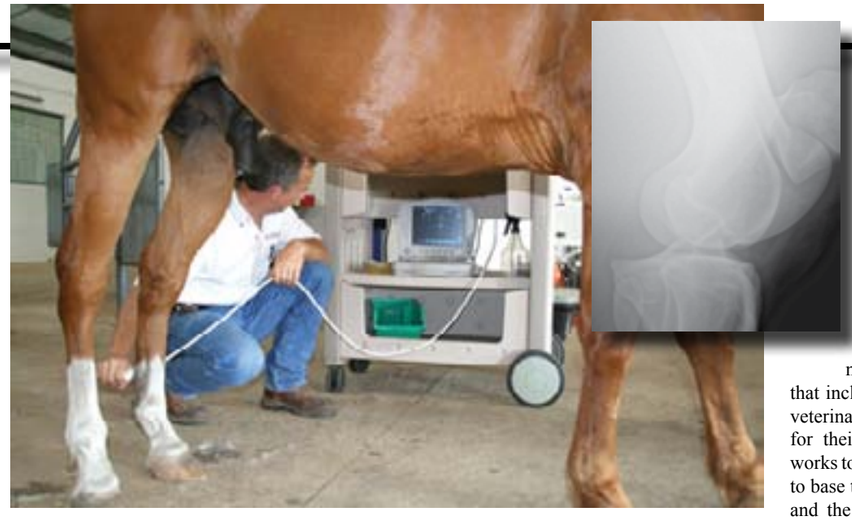
Last year you bought that special mare and bred her to that special stallion and after almost a year of waiting and making sure the mare had every nutritional and environmental advantage available to her, the time for the foal's birth is here. You made sure the mare got all her pre-foaling vaccinations four to six weeks before her due date and you have made all the correct decisions in this process so far. Now you have to decide whether or not to let the mare take care of the birthing process on her own or do you make sure someone is with her when she foals?

We all want our horses to perform at the best of their ability and we try to give them every opportunity to do just that. We breed the best mare we possibly can to the best stallion we can find and afford and hope that the resulting foal is better than either parent. Then we feed the new foal so that it gets all the nutritional advantages possible. We trim their feet once a month from the time they are a month old so that their legs can grow straight and strong. We train them to handle well, load in a trailer and the list goes on and on. Finally the horse we raised or the horse we carefully picked out at a sale is ready to be put in training. We either do that ourselves or we do our research and find the best trainer we can and we map out a plan for our equine athlete's career. He may be a racing quarter horse, a barrel horse or any type of horse that competes by using his athleticism. Whatever his job, we want him to have every edge to be able to do that job to the best of his ability.

Once he is in training an owner has many decisions to make that concern his equine athlete's health. Those decisions need to be made very objectively since they are not only important to the health and soundness of the horse, they are also important to the health and soundness of the owner's individual business and they are important to the health and welfare of the racing, barrel racing and other using horse industries as a whole. These decisions include joint injections, supplements and a vast array of products that are advertised with claims to enhance the horse's performance. All of the products and medications cost money. The person who is eventually responsible for paying for these products and medications is the owner. The owner is the "golden goose" of each industry. Without the owner, there is no need for the trainer, farrier, veterinarian or any of the products. Therefore all eyes need to be upon the owner. The horse's health and well being should always be considered first and foremost but the owner should be next in line. There are probably a lot of horses treated by well meaning people but the reasons for the how's and whys of treatment are not based on science and research. They are based on anything from tradition to the latest and greatest new thing advertised on face book.

It is a common practice in racing circles to inject several of a horse's joints before each race. Many horse's are injected before time trails and then again within two weeks when they are scheduled to race in the finals. Joint injections should be given as the result of a diagnosis which is derived from the information gathered during a lameness examination. The lameness examination may include good quality x-rays and other diagnostic modalities such as ultrasound which reinforce the diagnosis and treatment of a lameness or unsoundness. They should not be given because it is the fashionable thing to do or because the winner of a big race had his hocks, stifles and feet injected and therefore it is surmised that is what every other horse should have done before they race also. It probably does not need to be done twice within a few weeks. Injecting a joint twice in two weeks between races is like changing the oil in your car after driving it a few hundred miles. If a joint needs to be injected every couple of weeks, then the horse really probably needs an extended rest period. Some owners are in the sport of horse racing, barrel racing or other competitive equine sport for a hobby or entertainment while others are in the sport as a business. Either way, the owner and trainer need to educate themselves about the pathophysiology of lameness. If everyone is educated about what they are doing, wise decisions will be made and the economy of the sport will remain intact. If owning a horse becomes a loosing proposition, the owners will not hang around for long unless there is some other factor offsetting the economic losses. Treatment choices should not be based on fear of loosing a competition or on tradition. Treatment choices should be based on scientific facts. Every owner and trainer does not need to learn and is not expected to learn the depth of knowledge that an equine veterinarian has regarding lameness. However if they don't go to the trouble to learn the basics, they at least need to put their horses in the hands of someone who has. The old saying "a little bit of knowledge is a dangerous thing" is true but no knowledge is usually much worse. Our horses give their best when we compete with them and they deserve that the people in charge of them spend the time to truly learn about different disease processes and their treatments and preventions.

Once the decision has been made to inject a joint then another decision comes to the forefront. What is the best product to inject the joint with? What product will result in the healthiest joint and what product is considering the long term soundness of the horse. Most joints that need to be injected have some form or grade of osteoarthritis. These joints keep themselves healthy by having their own joint capsules and synovial membranes produce hyaluronate. Hyaluronate is a natural lubricate in everyone's body that is in all parts of the body that are lubricated. The joint is no different and produces it own hyaluronate when the joint is healthy. If the joint capsule or synovial membrane has been traumatized in some way and is inflamed, the joint ceases producing sufficient hyaluronate to effectively lubricate the joint. This is when a joint needs to be injected. There are several forms of hyaluronate to choose from when deciding to inject the joint. The best products have a high molecular weight. They are like using higher quality motor oil versus lower quality motor oil in your car. They last longer and protect the joint better than using a hyaluronate product that has a lower molecular weight. Many times a steroid is also injected into the joint. All steroids have an anti-inflammatory effect on the joint but in the long run some steroids have a deleterious effect on the joint cartilage. The steroids with the long term negative effects tend to have longer lasting anti-inflammatory properties in the joint but there are better choices in steroids most of the time. Some steroids such as triamcimilone are actually "chondroprotective" and not only have an anti-inflammatory but they also protect the joint. Sometimes the choice of steroid may be dictated by the withdrawal periods established by the governing body of the sport. If that is the case, it is best to try to think ahead and if possible use the chondroprotective steroid enough days in advance of the race or event.



Diagnostic modalities, such as ultrasound, reinforce the diagnosis and treatment of a lameness or unsoundness.

Joint injections are an important part of keeping our equine athletes sound and performing to the best of their ability. They are good when used correctly. There is actually nothing negative about injecting a joint when it is done for the right reasons. Routine is not a good reason and it is an expensive reason. A good diagnosis is a good reason and it is a cost effective reason. I have my own shoulder injected on a periodic basis. Part of the reason I have it injected is because it hurts if I don't. The other reason I have it injected it to further protect the joint cartilage and keep it lubricated. But there was a diagnosis that caused my shoulder to be injected. It was not a matter of routine. The responsibility to treat our horses judiciously with injections and other medications lies with everyone involved including the owner, trainer and equine veterinarian. Many owners and trainers do not want a diagnosis. They tell the veterinarian what to inject or how to treat. They also let it be known that if a particular veterinarian will not do as they say they will find one who will. This is where the gray zones exist and why everyone looses. The treatment needs to be a well thought out plan that includes the horse, owner, trainer and the veterinarian with everyone being given respect for their individual knowledge. If everyone works together and uses science and experience to base their decisions on, the individual horse and the racing industry will be better off in the long run. A thorough physical exam with at least the veterinarian and trainer involved will tell everyone if a certain treatment needs to be given. If a thorough exam is not given to the horse, subtle problems can be missed and the results can be disastrous. If the horse needs to have diagnostic nerve blocks, x-rays or ultrasound to diagnose a problem then do them. If the diagnostics are done up front versus trying this and then that as a way to diagnose a problem, the horse and everyone involved with him will usually save a lot of time and money and the horse will be better served. If in all cases we do what is best for the individual horse, we will be doing what is best for the horse industry and everyone involved in the horse industry both in the short term and in years to come. We have been blessed to work in a great industry that revolves around what most of us would do for fun. Our industry owes it to the horse and to itself to think long term.

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