

DRESSAGE, EVENTING, HUNTERS, JUMPERS

VOL. 2

PRACTICAL HORSEMAN EXTRA

Colleen Rutledge
and Covert Rights

COLLEEN RUTLEDGE

Develop a
Strong Galloping
Position

JOINT HEALTH

How to Manage
Osteoarthritis

Brought to you by:

COSEQUIN®
Joint Health Supplements

WHEN PERFORMANCE MATTERS, CHOOSE **COSEQUIN®**

Joint Health Supplements



COLLEEN RUTLEDGE,
CHOOSING COSEQUIN
SINCE 2009.

\$10 REBATE*



CHECK THE LID FOR DETAILS, AND GO TO COSEQUINEQUINE.COM/REBATE TO REDEEM.

*Survey conducted among equine veterinarians who recommended oral joint health supplements.
*Rebates applicable on qualifying purchases of Cosequin® ASU and Cosequin® ASU Plus large tubs purchased on or before 12/31/2021.
Rebate submission requires our authentication code located on the rebate sticker.

The job of eventing riders is to maintain proper balance and a secure, efficient galloping position to give their horses confidence and make their jobs easier on cross country. Here, the red line shows how my center of gravity is aligned directly over my base of support, giving me a solid, balanced position while I gallop the Hanoverian gelding Escot 6.



DEVELOP A STRONG GALLOPING POSITION

A five-star rider explains her key to success—riding in balance.

By Colleen Rutledge with Sandra Cooke
Photos by Amy K. Dragoo

When someone comes to me as a new student, I usually say, “Don’t take this the wrong way, but you’re not going to jump for a while.” Before we work over fences I want my riders to work on position—and their galloping position in particular. Otherwise, we’ll have to come back later and fix the position flaws that become a bigger issue as a rider progresses. This happens because our horses go the way we ride them: Horses want to feel secure, which includes knowing that their riders feel secure. If we’re riding out of balance, our horses go out of balance. At the beginning of every year, even I review my position and determine where improvements can be made.

Some eventing riders take the attitude that if their horses can jump and they can stay on, who cares? But what I teach is not about looking good, it’s about being functionally efficient and correct. The easier you are to carry, the happier your horse is. A happy horse does his job much better. My goal as a rider is to make myself the easiest possible package for my horse to carry, and that’s also my goal for my students.

When Balance Is Lacking

First let’s talk about the position errors I commonly see and how they affect your riding. To secure your leg, riding books and many instructors typically tell you to close your knee. But

they don’t specify that you should not close the **FRONT** of your knee, and that is the part with which most people grip. When you pinch with the front of your knee, you close your inner thigh. Then your lower leg usually swings back and at this point you become a physics problem: If your lower leg goes back, your upper body wants to tip forward. To your horse, this scenario feels as you would trying to give a piggyback ride to a small child who is all over the place—leaning here, leaning there. You lose your focus because you have to rebal-

ance and think about where you’re putting yourself. In the same way, the more motion your horse has on his back, the less he can concentrate on his job.

Over fences, if your grip is wrong, causing your lower leg to swing back and your upper body to tip forward, you either throw your horse off balance or you overcorrect—falling backward and holding on to his face to keep your balance. The result of either situation is that your horse may slow down off the ground or run at the jump.

Even if your lower leg is stable but you’re in the habit of jumping for your horse by leaning forward, you make his job more difficult. Instead, allow his jump to move you. It’s hard at first to allow that to happen. We are all control freaks. We so much want it to go correctly that we make it our job to jump for the horse.

Finding Balance

OK, enough about doing it wrong. Now I’ll explain the position that enables you to stay in balance with your horse and makes you an effective rider in all three phases of eventing. The key is keeping your center of gravity above your base.

Your center of gravity, or center mass, is

TIP

The easier you are to carry, the happier your horse is. A happy horse does his job much better.



Colleen during the 2016 Rolex Kentucky Three-Day Event

Five-Star Success

In 2011, Colleen Rutledge rode Shiraz to her first five-stars (Rolex Kentucky Three-Day Event—where she placed 12th—and Burghley). She completed a total of five five-stars with Shiraz before his retirement at age 18, and was named to the U.S. Equestrian Federation World Class High Performance Training List with CR in June 2015. By then she had already competed CR, then a 9-year-old, at Rolex, where they came in 11th. The recognition helped her get to Burghley with CR that fall, where they finished 22nd.

More recently, Colleen and CR won 2019 Plantation Field CCI****-S (September) and 2019 Morven Park CCI****-S. They placed second in the CCI****-S at Great Meadow International in the summer. She and Global Absolute were seventh in the 2019 Young Event Horse Championship for 5-year-olds in October. In 2018, she and C Me Fly won the USEF CCI* Eventing National Championship.

Colleen is a popular clinician and trains out of her family’s Turnabout Farm in Howard County, Maryland. Her daughters Cassie and Ciana both compete in eventing.

When Balance Is Lacking



A common error I see is when riders pinch with their knees and their lower legs swing back, causing their upper bodies to tip forward. As shown by the expression of Roulette, a 9-year-old Oldenburg gelding owned by Leslie Schulz, this scenario can be distracting to a horse because you're constantly in motion, rebalancing yourself. The red line shows clearly that my base is not under my center of gravity.



Many riders who grip with their knees try to overcorrect the problem as they head to a fence and end up falling back and grabbing the horse in the mouth to hold their balance. Here on Covert Rights, my 11-year-old Thoroughbred/Clydesdale gelding, I'm demonstrating this: My center of gravity has shifted backward, causing my lower leg to slip in front of me. Because my base of support is unstable and not aligned directly under me, I am using my reins to keep my balance. This bad habit can cause horses to slow down or run at the jump.

located just behind your belly button and in front of your spine, centered vertically in your body. And your base is where you grip to keep balance, ideally your lower leg. To keep your center of gravity above this base, you need to achieve what I call the basic balance position: You close your leg by turning your toe out slightly and contacting the saddle with the *back* of your knee. To find it, locate the hollow at the top inside of the calf muscle—just below where your femur joins the tibia to create the hinge of the knee joint. Contacting the saddle in this way allows you to let go

with your inner thigh. I sometimes tell students to imagine there is a tennis ball between the front of their knee and the saddle. This leg position makes it impossible to pinch with your knee and grab with your thigh.

This position lets you use your lower leg and your pelvic girdle—the muscles around your hips and waist—to truly follow your horse's motion with your hips. Allowing this motion enables you to create

energy. But you need to work through this concept because it's natural to want to grip with your knee and inner thigh. When first learning to canter, most riders try to hold themselves on their horses by gripping incorrectly. For galloping and jumping, you need to use the muscles on the outside of your leg, between your hip and your knee and between your knee and your ankle, to close your legs around your horse like a hinge. My coach and mentor Jim Wofford sometimes tells students to imagine "closing your knees into your horse's shoulder muscles" when galloping.

In addition to a correct leg position, your core—your abdominals plus the muscles that lie along your spine—is critical to keeping your center mass balanced over your feet. I tell my students that to engage their core they need to consciously push their middle together, imagining that they are creating a more cylindrical feeling in that area. Another technique I teach is "push your stomach muscles and back muscles together as if someone is about to smack you in the stomach and you want to counteract that punch."

Testing the Balance

Your leathers are the recommended length for galloping and jumping when you take your feet out of the stirrups, letting them hang down, and the tread of the stirrup iron touches your

TIP

To help keep your center of gravity above your base, close your leg by turning your toe out slightly and contact the saddle with the *back* of your knee.

Finding the Balance



To have a balanced position, you must align your center of gravity vertically above your base of support, as shown by the red line. Your center of gravity is located between your belly button and your spine, and your base is in your lower leg.



Make sure your stirrups are the correct length for galloping and jumping. When you take your foot out of the stirrup and let your leg hang, the tread of the stirrup iron should hit at or slightly above your ankle.



To set the leg position that enables you to stay in balance with your horse, close your leg by turning your toe out slightly and contacting the saddle with the back of your knee. This allows you to let go with your inner thigh. This position lets you use your lower leg and your pelvic girdle—the muscles around your hips and waist—to follow your horse's motion with your hips.

TIP

To practice this new leg position, shorten your stirrup leathers two or three holes above your regular galloping and jumping length. Then practice riding in a two-point position.

leg at or slightly above your ankle. To introduce students to the new balanced position I described earlier, I have them shorten their stirrup leathers two or three holes above their regular galloping and jumping length. Then I tell them to rise into their two-point galloping and jumping position. As they bend their hip angle, I remind them to “focus on opening your knee and thigh, step down into your lower leg, really engage your core and push

your hips back a little,” to keep their center mass over their base.

The reaction is usually immediate—and dismayed. The shortened stirrups make it impossible to pinch with the knee because there's nothing to pinch against and they enable the riders to perceive exactly which muscles they need to use to maintain a balanced position. These usually are muscles they haven't used much before. New students often complain that their backs and their knees are really feeling the new challenge.

Sometimes I put a neck strap about halfway up the horse's neck and tell the students they can hook *just a finger* in the strap for a little help while they learn where their balance is and how to use the proper leg muscles and core muscles to maintain it—without trying to balance on the reins. The strap is also a reminder to shift their weight back a little bit to get their center mass over their feet. If students say their back hurts in the new position, I explain that it's because they're using their back instead of their core to hold themselves up. The remedy is for them to pull their stomach in to support their back.

Building New Muscle Memory

Our ultimate goal in this work (and it is work!) is to *replace* the muscle memory of an ineffective galloping and jumping position and motion with the one that works. This is an important concept because you can't learn to simply *stop* doing whatever it is

TIP

A new, correct riding position can feel unnatural. Have a friend take a photo or video as you ride so you can see that the new position is correct even if it feels wrong.

Center of Gravity In Dressage

In dressage, you ask your horse to bring his hindquarters under his body, lift his back and withers and take a contact. But when you grip with your knee, causing your leg to swing back and your upper body to tip forward, you block the energy you're developing from behind. So it's like driving with the parking brake on. With your *lower leg*, you're telling him that you want him to go forward, while your *thigh is restricting the energy* when it grips to support your upper body's forward lean. At some point, he stops listening to your subtle cues.

In addition, many riders grip with their legs incorrectly just to try to hold themselves still on their horses for flatwork. A truly "still" rider cannot maintain the proper



Keeping your center of gravity balanced over your base of support is also important in dressage. As I perform a dressage test with Covert Rights, my leg is properly positioned and I'm following his motion with my hips to keep him supple and energetic. If I were to grip only with my knee, my lower leg would tell him to go forward but my tight thigh (which is supporting my forward upper body) would restrict his energy and send him conflicting signals.

motion with the horse. Motion you can see is motion against the horse's motion.

As I discuss in "Finding Balance," on pages 4 and 6, for the galloping position, in dressage you want to use your properly positioned lower leg and your pelvic girdle—the muscles around your hips and waist—to follow your horse's motion with your hips. A dressage balanced position is a much more vertical position than the galloping position. The more core you can develop, the better control you'll gain over your position. This is what you need to do to sit the trot effectively and as efficiently as possible.

Testing the Balance



To try out your new balanced position, shorten your stirrups two or three holes above your normal galloping and jumping length. As you rise to your two-point position, focus on opening your knee and thigh, stepping down into your lower leg and engaging your core. This will help you keep your center mass over your base. You may hook one finger under a neck strap for a little help as you adjust to this new balance.

that doesn't work—unless you are replacing it with a different action. So once my students have gotten used to the feeling of the new position at the standstill and walk, I tell them to trot. (I tend to do most of my clinic teaching at the trot because there are two beats, or motions, within each stride, which requires riders to work twice as hard as at the canter.) Now when they pick up a trot they need to isolate their position from both the up-and-down and the side-to-side motion of the gait. Another advantage is that the trot is not as fast as the canter, so riders feel more in control as they're trying to make all these changes.

I often have students alternate five or 10 steps in the two-point position with a few strides of posting, building it up until they can hold the two-point for 20 or 30 trot strides. When they can hold the balance position down the long side of the arena at a trot, I put down some ground poles. First we do regular trot poles set at standard striding. Then I put down what I call "pick-up sticks"—some poles are set on a short stride, some on a long stride, some are even set at angles. As horses start to trot through these, riders have to adjust their position to maintain their center mass over their base for the variations. This helps them learn to control their horses while maintaining the new position.

The next step is to set up some simple low (as small as 18 inches) jumping gymnastics. This helps students zero in on where they might have particular challenges over fences. Often when I

Building New Muscle Memory



Once you've gotten acclimated to your new two-point position and can hold the balance position down the long side of the arena at the trot, you're ready for an exercise. I like to put down ground poles at random intervals. Some are set on long strides while others are set on short strides, and I'll even include angles. As Roulette trots over the poles, I focus on adjusting my position and maintaining my center mass over my base. This exercise helps you learn to control your horse while maintaining this new position.

ask riders, "Can you feel how you fell forward right there?" the answer will be "no." For their next pass through, I have my cell phone out to video them so I can show them exactly where and how they need to reinforce their position.

As with any change in something riders have been doing a certain way—even if it's the wrong way—for a long time, riding in the basic balance position feels odd to many new students. As they're struggling they say, "This feels so unnatural!" So I give them instant feedback: I snap a picture with my phone and when I show them how they look in the new position they say, "That is NOT what it feels like!" The truth is that our bodies lie to us. For instance, if—like many of us—you get used to riding a little crooked in the saddle, it feels as if you're sitting straight. Then, when you fix it so that you're sitting evenly, your body tells you you're tipping. That's why I encourage students who are working on their position to buddy up. Ride with a friend so you can critique each other or enlist a friend who can stand on the ground and video you with her phone. If you can't get feedback this way, try riding in an arena with a mirror.

Use Cross-Training—and Music

Some athletic activities other than riding can contribute to a better position. One is skiing because to do it well you have to engage your core, turn your hips, use your pelvic girdle—sound

A Different Body Type



Great Britain's William Fox-Pitt is a good example of a rider whose body type is quite different than mine. Even though he's very tall, he's learned how to package his body and keep his center of gravity over his base, ensuring an effective, balanced galloping position.

familiar? Another type of exercise that relates directly to riding is almost any type of dance training because the muscle control you learn for dancing is similar to what you need for riding. Yoga, which also entails muscle control and balance, helps as well.

Once you've learned to maintain the new position for a couple of minutes at a time, a helpful technique is riding to music. I suggest my students get some music they really love on their personal listening device and begin by trying to hold the new position for the duration of one song, then two songs and so on. I use music myself when doing my gallop sets. It helps me override the voices in my head that are telling me I've done enough for the day, I'm as fit as I need to be.

I'm not saying that the basic balance position is the only improvement in your riding that will bring you success. But I do know that most riders recognize, even subconsciously, when they are out of balance. That makes them feel insecure—and insecurity hinders your progress. Fixing your position brings you one big step closer to maximizing you and your horse's potential as a team and reaching your goals. 🎵

TIP

Listen to music you love as you ride. Try holding the new riding position for the duration of one song, then two songs and so on.

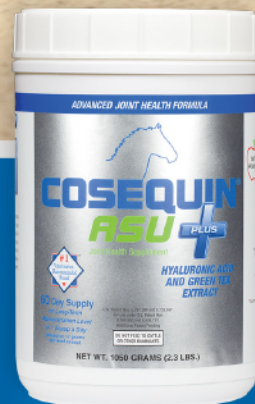
WHEN PERFORMANCE MATTERS, CHOOSE

COSEQUIN®

Joint Health Supplements



\$10 REBATE*



CHECK THE LID FOR DETAILS, AND GO TO COSEQUINEQUINE.COM/REBATE TO REDEEM.

*Survey conducted among equine veterinarians who recommended oral joint health supplements.
*Rebates applicable on qualifying purchases of Cosequin® ASU and Cosequin® ASU Plus large tubs purchased on or before 12/31/2021.
Rebate submission requires our authentication code located on the rebate sticker.



Osteoarthritis often develops in a horse's hard-working, weight-bearing joints, such as the fetlocks, knees, hocks and stifles. Horses participating in high-level competition are often more prone to this disease due to overuse.

COMBATING JOINT DISEASE

Degenerative joint disease, or osteoarthritis, is an irreversible condition, but careful management of symptoms will keep your horse moving freely.

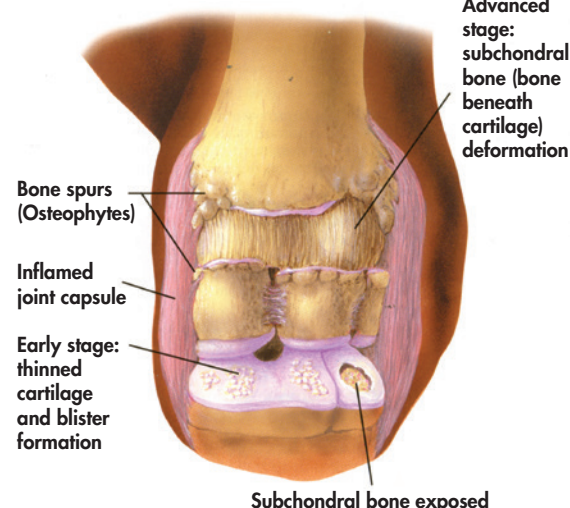
By Leslie Threlkeld

Did your horse take a funny step or are you just imagining it? He seems to be working happily and you checked his feet for stones before mounting. Yet he does seem to take a little longer to warm up for work recently. Could something be wrong?

When your horse comes up lame or even a bit stiff or lackadaisical under saddle, countless different ailments could be the cause. One likely reason for lameness or a reluctance to work has to do with soreness in the joints. Many joints work together to allow a horse to accomplish daily activities like walking and grazing in the field as well as athletic feats like jumping a cross-country fence or performing a half-pass in the dressage arena. When a joint becomes painful, a horse's ability to move comfortably is compromised.

Similar to humans, horses may develop arthritis in their joints that can lead to decreased mobility. Osteoarthritis, also known as degenerative joint disease, is one of the most common causes of lameness. While it cannot be cured, the symptoms can be controlled so your horse can continue to do his job.

Degenerative Joint Disease



COURTESY, ILLUSTRATED ATLAS OF CLINIC EQUINE ANATOMY AND COMMON DISORDERS OF THE HORSE



© PAULA DA SILVA/ARND NI

Certain conformation flaws, such as knock knees, upright pasterns, sickle and cow hocks (shown) or very straight hind-leg angles, may put undue stress on joints and could contribute to osteoarthritis development.

How Joints Work

To understand osteoarthritis, you must first understand a joint's structure and function. In a joint, two or more bones connect and allow movement through the harmonious force of muscles, tendons and ligaments.

The ends of the bones are contained in what is called a joint capsule, the health of which is extremely important to a horse's ability to move. In the joint capsule, a layer of cartilage on the surface of each bone prevents the bones from painfully grinding against one another. Synovial fluid, produced by the synovial membrane in the joint lining, fills the joint capsule to provide additional protection and lubrication.

The joint maintains healthy function in an efficient wear-and-repair process that produces synovial fluid and repairs damaged or aged cartilage cells. However, if the joint is compromised through injury or

overuse, the cartilage will wear away, putting more pressure on the bones and causing pain and discomfort. It is the combined breakdown of cartilage and the resulting secondary changes in the bony structures of the joint capsule, such as bone spurs (osteophytes) or subchondral (bone beneath cartilage) deformations, that is known as osteoarthritis. Because lost cartilage cannot be regrown, the damage caused by osteoarthritis is irreversible.

Cause And Effect

Joints will naturally experience wear and tear over time, but there are several factors that may lead to the development of osteoarthritis.

Conformation flaws, such as knock knees, upright pasterns, sickle and cow hocks or extremely straight hind-leg angles, may put abnormal pressure on joints. The chances of developing osteoarthritis also increase with age simply due to many years of hard use

during training and competition.

"It could be chronic cyclical forces over an athletic career that cause stress and injury to the cartilage, joint capsule and synovium," explains Dane Tatarniuk, DVM, MS, DACVS-LA, a clinical assistant professor at Iowa State University's College of Veterinary Medicine. Osteoarthritis is more likely to develop in hard-working, weight-bearing joints, such as the fetlocks, knees, hocks and stifles. How quickly osteoarthritis progresses can vary, however. Major injuries like a fracture or an infection can cause the disease to worsen quickly. Transient or short-lived inflammation in a joint will not necessarily cause osteoarthritis, but it could eventually be a problem if the reason of the inflammation is not addressed.

At the cellular level, degradative enzymes most commonly belonging to the family called matrix metalloproteinases (or MMPs) increase with inflammation. "These MMPs, in higher concentration compared to normal joints, lead to erosion of the cartilage," Dr. Tatarniuk says. "As the inflammation persists, the body responds by trying to stabilize the inflamed joint. This is why the joint capsule thickens, and increased mineralization and bony changes start to progress. The changes to the bone are a slow physiological response to the chronic inflammation present."

Symptoms of osteoarthritis range from mild to severe joint pain and lameness. You may also notice heat caused by inflammation. In the early stages of the dis-

Horses participating in a high-intensity athletic career will be more susceptible to osteoarthritis due to repetitive use during training and competition.

and the natural degeneration of the body. Another possible cause of osteoarthritis is a soft-tissue injury or infection that causes inflammation in a joint. However, the simplest explanation for the development of osteoarthritis is use. Horses participating in a high-intensity athletic career will be more susceptible due to repetitive use

ease, your horse may seem only to have some stiffness in his joints after he's come out of the stall or begun a work session. On the other hand, he may experience varying degrees of lameness or decreased performance and a reluctance to work. Call your vet if your horse is suddenly or increasingly sore or lame.



© PAULA DA SILVA/ARND NI

To provide an accurate diagnosis, a vet will typically conduct a lameness exam, including flexion tests of the horse's joints.

Diagnosing the Disease

As with any lameness in horses, the first step is to find the source of the pain. The vet will begin with a physical exam and try to narrow down the exact location of an injury. Some signs he or she will look for are excess fluid, heat, decreased range of motion and pain associated with flexion tests.

"The hallmark of diagnosis that every vet should start with is thorough palpation and watching the horse move," Dr. Tatarniuk says. "We try to identify which legs are lame by watching them trot on a straight line or longe line. Flexion tests are common to look for an increase in soreness and give an idea of which area is hurting. From there, we palpate the legs thoroughly from top to bottom."

In some cases, joint effusion—increased synovial fluid in the joint capsule—secondary to inflammation may indicate disease. "Sometimes the fluid is normal in a joint, and it's the veterinarian's job to determine if the joint is truly sore. But if there is fluid and the joint flexes positive, there will be strong suspicion that that is an area of concern."

Once the vet has identified the limb causing a horse's lameness and further narrowed the location of pain down to a

How Does Joint Disease Affect My Horse's Career?

Because osteoarthritis widely varies in how quickly it progresses and the level of pain it produces, a positive diagnosis may mark a different future, depending on the horse. In the case of early-onset osteoarthritis that is progressing slowly, a horse may easily continue his career supported by appropriate joint management. In more acute cases, a horse may need to reduce his workload or compete at a lower level. For older horses, transitioning into retirement may be the best solution. Much of it depends on what the horse's job is and his level of use.

"Let them tell you what they can do. If they are happy working and are comfortable and sound with some maintenance, keep them working. If you can't keep them comfortable and sound, it may be time to think about a different career or lesser workload," says Patrick Loftin, DVM, MS, a surgeon at Tryon Equine Hospital.

"Don't despair. It's not necessarily the end of your horse's career. There are many horses out there doing high-level jumping, dressage and even racing with ugly X-rays. Work with your veterinarian to come up with a plan for your horse to moderate symptoms and keep him comfortable as well as an exercise program. Try to reduce inflammation and slow the progress of the symptoms and progression of clinical signs and lameness."

If you plan on competing in rated shows while your horse is on medication for joint pain, be sure to check the United States Equestrian Federation rules to ensure the drugs your horse is taking are allowed. You can email the USEF Drug Hotline medequestrian@aol.com or call 800-633-2472.



© AMY K. DRAGOO

An osteoarthritis diagnosis doesn't necessarily mean your horse's show career is over—proper management can help keep him ready for competition.

specific area of the leg, it may be necessary to block nerves with an analgesic like lidocaine to isolate the pain. If an area is numbed and the horse's comfort improves and he moves more soundly, then the vet knows there is inflammation or pain in the numbed area. From there, the vet will use radiographs to examine the bones of the joint. Cartilage damage will not show up on a radiograph, but as the disease progresses, bone spurs (bony growths on the edges of bones that indicate an area of increased force on a joint) may be visible. The narrowing of a joint space due to cartilage loss may also be visible on an ultrasound. Cartilage acts as a supportive

cushion and shock absorber between bones. If the cartilage wears away, there is nothing separating the bones and allowing smooth movement of the joint. Severe cases of cartilage loss may result in painful bone-on-bone situations.

"That's where we might see osteophytes, or spurs, which are bony proliferations or irregularities associated with the joint. That gives us an idea of how far the bony changes have progressed. If we see no abnormalities on the radiographs, but there are clinical signs of osteoarthritis, it could just be the early stages of the disease," Dr. Tatarniuk says.

Ultrasounds are typically used to diag-



Radiographs of joints are common during the prepurchase exam process.

Radiographs For Prepurchase Exams

Radiographs are a normal part of a prepurchase exam, and the parts of a horse's anatomy you decide to X-ray may depend on his history and intended future use. For instance, you're likely to look at the front feet and knees of an off-the-track Thoroughbred you hope to event. Alternatively, you may look at the hocks and stifles of a

horse who has been jumping for some years if you're hoping to continue competing him. Radiographs can reveal any number of things, but you shouldn't get bogged down in one single inconsistency on an X-ray. You have to look at the whole horse.

"I try to take the X-rays as one piece of the entire exam," Dr. Loftin says. "If he's out showing and winning and is sound on my exam, negative on flexions and I look at the X-ray and see arthritic changes, I'm going to be less concerned about that. Or the X-rays could not be as bad, but there is clinical evidence that there is arthritis active and causing a problem."

Ultimately, you as the buyer have to decide how the results of the prepurchase exam fit into what you want to do with the horse and what you're willing to manage as he ages. "You can still get a long, useful career out of a horse with arthritis. But are you OK with having to do joint injections in the future? It all comes down to the buyer's risk tolerance," Dr. Loftin says.

nose soft-tissue injuries, but they can also be used to evaluate the margins of the joint. Patrick Loftin, DVM, MS, a surgeon at Tryon Equine Hospital in Columbus, North Carolina explains that when using ultrasounds, "You can't see through the bone, but you can start to see if a spur is building and is not fully calcified. You can also see if there is excess fluid or if the synovium is thickened." An inflamed synovial membrane is known as synovitis and may cause pain and swelling of the joint.

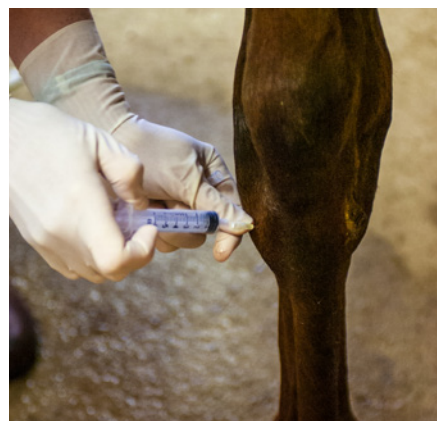
It is possible to perform an MRI (magnetic resonance imaging) for further examination, but this is a very specialized and expensive procedure. Few veterinary facilities have MRI machines, and they are rarely used, especially to diagnose arthritis, which can usually be accomplished through a physical exam and series of X-rays.

Osteoarthritis is not always the cause of joint pain. It is possible that the collateral

ligaments or other structures of the joint have been injured. "It could be 100 different things and that's where your physical and lameness exams come into play," Dr. Loftin says. "When we talk about arthritis in the horse, it seems like the most common thoughts are of the cartilage and bone spurs, but the joint is a full-functioning structure. There's cartilage but also underlying bone, synovial lining and joint fluid that all have to work together to make the joint function normally. You have to think about it as an entire structure."

How to Cope With Joint Disease

Degenerative joint disease cannot be cured. "Once it starts you can't turn back the clock," Dr. Loftin says. However, you can manage the symptoms and potentially slow the progression of the disease. It is ideal to catch the signs of disease early so that treatment can begin. The primary



A common osteoarthritis treatment option is injecting the joint directly, which delivers the medicine straight to the affected area.

goals when treating osteoarthritis are to reduce inflammation in order to slow the degradative process and subsequently provide the horse with some pain relief.

Systemic anti-inflammatories or a non-steroidal anti-inflammatory medication, such as phenylbutazone, are typically the first step in treatment. Some horses are sensitive to taking bute for an extended period of time and may develop stomach ulcers or kidney problems. Therefore, bute is an effective treatment to soothe acute arthritis flare-ups, but firocoxib (Equioxx®) may be a better long-term solution because it is gentler on the stomach.

Dr. Loftin says that medications such as hyaluronate sodium delivered intravenously (LEGEND®) and polysulfated glycosaminoglycan delivered intramuscularly (Adequan®) have good results as far as full-body care, especially for horses who have multiple joint problems, and can help increase joint function before resorting to intra-articular joint injections.

Intra-articular joint injections, or injecting the joint, deliver the medicine straight to the affected area rather than treat the whole horse with systemic drugs. The most common type of injectable medication are corticosteroids, but Dr. Tatarniuk explains that while they are "very good at reducing inflammation in a joint, they are a little irritating to the cartilage" over time.

"Studies find that long-term use of steroids, although very good at reducing inflammation, will increase the amount



You can help prevent joint issues in your horse by monitoring his weight and making sure he has a regular exercise program that's appropriate for his level of fitness. Consistent turnout also is key—you don't want to keep an arthritic horse in a stall.

of degradative enzymes in the joint," Dr. Tatarniuk says. "The short-term gain of reducing the inflammation in the joint from the corticosteroid helps eliminate pain and lameness. But long-term or repetitive use certainly does not help the degradation of the joint already happening from osteoarthritis. However, with arthritic joints, the steroids are very effective at reducing inflammation and improving comfort, so they still act as a very important tool in managing arthritis. This rationale, though, is why preventive joint injections with a corticosteroid in a healthy, non-arthritic joint are not recommended.

"Newer biological therapies include platelet-rich plasma [PRP] and stem cells," Dr. Tatarniuk says. "They are usually derived from a horse's own blood system or bone marrow. Basically, we're manipulating the cells in the body to secrete really good anti-inflammatory proteins that are natural and in high concentrations. We are learning a lot about how and why they work. They do seem to be anti-

inflammatory in nature and may have a regenerative effect in the joint."

Dr. Loftin agrees that treatments like stem cells and PRP are still being researched and are less common in clinical practice. "Once you have cartilage loss, you can't get that back even with stem cells. Hopefully, down the road we will gain more information on the use of these therapies in diseased joints."

In general, making sure your horse is at a good weight and remains active with regular turnout and some level of exercise will promote joint health.

Besides administering NSAIDs and joint injections, there are other treatment options that horse owners may find effective for managing joint pain and inflammation. Some compression therapies and specialized wraps are designed to increase blood flow and can help prevent swelling.

Additionally, there are hundreds of oral supplements on the market that may

support joint health. However, Dr. Tatarniuk cautions, "Joint supplements aren't regulated by the FDA so there can be a lot of variability in consistency, ingredients and quality assurance. I usually tell clients that some companies out there put a lot of time and effort into supporting research into the efficacy of their product. Work with your vet to determine the best joint supplement so you know you get what you're paying for."

In general, making sure your horse is at a good weight and remains active with regular turnout and some level of exercise will promote joint health. The last thing you want to do is keep an arthritic horse in the stall and limit his movement. Just as people do physical therapy after a major injury to keep the bone and joint structures functioning properly, horses also need to keep moving.

Dr. Loftin stresses, "We're not talking about covering up pain and keeping them in work. We're trying to keep the joint functional and normal." 🐾

WHEN
PERFORMANCE
MATTERS,
CHOOSE

COSEQUIN®

Joint Health Supplements



\$10 REBATE*



CHECK THE LID FOR DETAILS, AND GO TO COSEQUINEQUINE.COM/REBATE TO REDEEM.

*Survey conducted among equine veterinarians who recommended oral joint health supplements.
*Rebates applicable on qualifying purchases of Cosequin® ASU and Cosequin® ASU Plus large tubs purchased on or before 12/31/2021.
Rebate submission requires our authentication code located on the rebate sticker.