

## **2019 SUMMER ICHO GAZETTE**

## International Curly Horse Organization

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#### **SUMMER GAZETTE 2019**

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Welcome and join us for our online AGM meeting with your ICHO staff, members and friends, October 5-6, 2019. This is a time to share and learn what is happening in your registry while we are all together. Please let us know if you would like an item added to the agenda, simply contact the ICHO office and share your ideas. We have had a HUGE year of wonderful genetic progress, maybe you have some questions!

In this issue, we have an article that is valuable knowledge for all horse owners, 10 EARLY WARN-ING SIGNS OF LAMINITIS. For most horses, laminitis causes varying amounts of pain, lameness, unsoundness and can cause structural damage within the hoof itself. None of us want our horses to suffer the debilitating effects of laminitis, which can be potentially caused by other conditions than diet. Learning the warning signs and early treatment may affect the success of treating the condition and we hope you might learn something new about this disease.



Join us for the ICHO AGM on OCTOBER 5-6, 2019

ELECTRONIC MEETING AT ICHOCHAT@YAHOOGROUPS.COM



#### **GAZETTE AD DEADLINE**

We now have a new Gazette ad deadline schedule for submitting ads as follows:

WINTER: Dec 15

SPRING: Mar 15

SUMMER: June 15

FALL: Sept 15

Ads that are received after the deadline will be run in the next following issue. Payments must also be made before the deadline. All ads and payment must be sent to the office. Thanks!

ARTICLES- We are always looking for interesting articles for the Gazette. The article could be about training, health tips, an interesting story about a Curly or anything of interest horse related. Please send all articles to the office before the deadlines. Awaken the writer within you!



#### INSIDE THIS ISSUE

AGM ......pg 3

10 Warning Signs of Laminitis.....pgs 4-15

#### ICHO now offers DNA testing for:

| Ancestral only TX A&M                 | \$25.00           |
|---------------------------------------|-------------------|
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| Genetic DNA Panel Testing             | \$99.00           |
| Visit the website for more info or co | ntact the office. |



# Gazette Ad Specials!

Stallion Station Ad-only \$10.00 per issue, \$40.00 for the year, color ad.

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All color Ads at Black and White Prices! All Gaz Color Ad fees reduced!!

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All ads must be copy ready in word doc format or jpg, png. Since we have reduced our prices we need the ads in ready to print format. For photos png is preferred since it has the best resolution. We can no longer accept pdf format because it does not insert clearly for the Gazette editing process.

All Ads must be sent to the office with payment. Ads also appear on the ICHO webpage.

Thanks! office@curlyhorses.org

Gazette editor- Joan Henning



# 10 Early Warning Signs of Laminitis

Your horse's best chance of overcoming this hoof disease might lie in your ability to catch it early.

Posted by <u>Christa Lesté-Lasserre, MA</u> | Aug 24, 2016 | <u>ArticleLameness</u>, <u>Laminitis (Founder)</u>, <u>Older Horse Care Concerns</u>, Diagnosing Hoof Lameness, Hoof Care, Horse Care, Lameness, Laminitis.

Your horse's best chance of overcoming this hoof disease might lie in your ability to catch it early.

It's a painful condition that veterinarians, farriers, and horse owners have been racking their brains about for decades. Laminitis—the separation or failure of laminae, which connect the hoof wall to the coffin bone within—can cause permanent structural changes in a horse's foot, leading to repeated bouts of disease and lasting lameness. In severe cases the pedal (coffin) bone in the hoof rotates downward, potentially even puncturing the sole and prompting the decision to euthanize. But get this: Watchful handlers can actually detect signs of laminitis in its early stages and intervene before the condition becomes debilitating.

"Everyone talks about laminitis being a lameness issue, but we know that horses start to get damage at a microscopic level before they show any lameness," says Andrew van Eps, BVSc, PhD, MACVSc, Dipl. ACVIM, senior lecturer and specialist in equine medicine at The University of Queensland Equine Hospital, in Gatton, Australia. Therefore, keeping an eye out for minute changes in your horse's health is key to maximizing his likelihood of recovery, says Tom Ryan, FWCF, a researcher and farrier based in Bedfordshire, U.K. "You have to be proactively thinking ahead," he says.

To help you catch this devastating hoof disease while your horse still has a chance to avoid suffering its consequences, our sources have helped us come up with a list of 10 early warning signs. Regardless of the type of case (<a href="supporting-limb">supporting-limb</a>, systemic inflammatory response syndrome, or <a href="endocrine disease-related">endocrine</a> disease-related), these red flags could indicate laminitis is setting in—even before you see any signs of lameness. So alert your veterinarian as soon as possible if you detect one or more of the following:

Horses developing laminitis might shift the weight off their feet twice as much as they normally do. Photo/stock



### 1. A strong/bounding digital pulse

Slide your hand down the side of your horse's lower limb where the digital artery runs through the groove between the flexor tendons and the suspensory ligament. Where the artery continues down the back of the fetlock you should be able to feel his pulse. Normally, the pulse should be faint or even seem absent, says Ryan. But in laminitic horses it will be stronger and is often referred to as "bounding." How do you know what's strong or bounding? "You kind of have to feel to know," he says. Ideally, you should get to know what's normal for your horse's digital pulse. A strong digital pulse can indicate other foot pain, as well, but a bounding digital pulse in both feet is a major clue that laminitis is to blame.



A strong or bounding digital pulse in both limbs is a clue that laminitis is to blame. Photo: Stephanie L. Church/The Horse.

#### 2. A hoof that's hot for hours

Healthy horses can have hot hooves, says van Eps, but not for long periods of time. It's normal for horses to experience large influxes of blood into their feet periodically, which causes hoof temperature to rise. But the body regulates this heat, and it should only last a couple of hours at most—unless it's hot outside. In other words, there's no need to panic if your horse has been standing in a sunny field on a 90-degree day and his hooves are hot. The time to worry is when hooves reach 91.4°F (33°C) for several hours in a row and the outdoor temperature is lower than 77°F (25°C). "That's a sign they could be getting laminitis, and that's what we've seen experimentally," van Eps says.

That increased temperature, says Ryan, is the hoof's response to the trauma within the laminar tissues.

Sometimes lameness follows quickly. "We see lameness begin eight to 12 hours after that temperature increase," van Eps says. If you don't think you can estimate surface temperatures well with your fingers, van Eps recommends using an infrared surface temperature gauge from a hardware store.



Laminitic horse shifting weight off sore and possibly hot hooves. Photo: Practical Horseman Magazine.

### 3. A distorted hoof shape and/or unusual rings

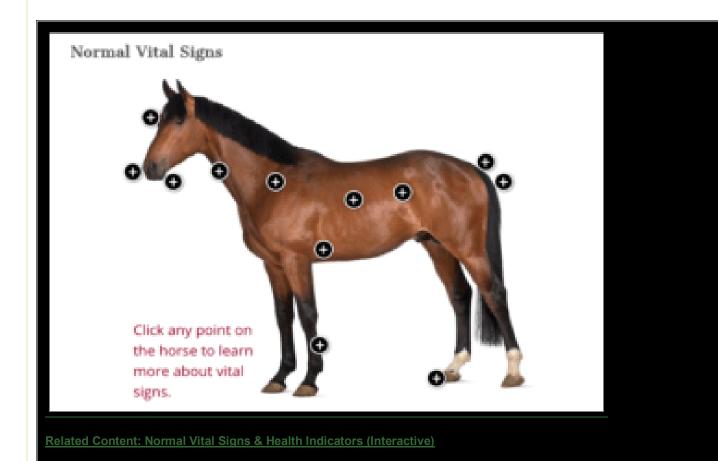
Healthy hooves grow faster in the dorsal (front) part of the hoof and slower in the quarters, says Ryan, creating smooth, wide, evenly spaced growth rings across the front of the hoof wall, which can be slightly closer together at the quarters. With laminitis, that growth pattern no longer applies; because the growth at the heels is now more rapid than at the toe, the horse develops wider growth rings at the heels. Currently, says Ryan, we don't understand why the heels grow faster than normal in laminitis.

This altered pattern causes the hoof's rings to curve upward and abnormal rings to develop on the hoof wall surface, which can precede lameness sometimes by months or years, says Donald Walsh, DVM. Walsh leads the Animal Health Foundation, in Pacific, Missouri, which funds research and education projects related to laminitis.

Ryan believes abnormal hoof growth starts before all evidence of pain, causing the laminae to be traumatized when the hoof capsule changes shape around the underlying pedal bone. He's been investigating the pain-relieving properties of cutting vertical grooves into laminitic horses' hoof walls, with the intention of reducing the effect of the distortion. The small strip of horn removed protects the dorsal laminae by isolating it from the rapidly growing heel. "Early grooving appears to protect the laminae from the more severe effects of hoof capsule distortion," he says, adding that research is pending on this theory. "Our experience indicates that if you can do it very early on, you can see pain relief within hours."



#### 4. An increased Heart Rate



"We used to think that heart rate was not a very sensitive indicator," van Eps says. "But we found that in our clinical patients the most sensitive indicator (for pending laminitis) is probably an increase in heart rate." Most horses maintain pretty consistent resting heart rates of 30-40 beats per minute (BPM). But van Eps has noted that heart rates of laminitic horses tend to rise a day or so before lameness sets in. "A mild increase in heart rate of even 6 bpm can be a significant early indicator that your horse is getting uncomfortable," he says.

"A lot of people have dismissed small heart rate changes, but actually they can be very useful warning signs if the horse's normal heart rate is known," he adds. You can measure heart rate with a stethoscope or by feeling for the pulse under the jaw or at the pastern, as described before. Exercise, excitement, and ambient temperature can also increase heart rate, however, so keep these influences in mind when interpreting results.

## 5. Too little—or too much—foot lifting

Horses rely on movement to get blood flow and the nutrients within to hoof tissues, says van Eps. But if a horse is injured in one leg, he might bear weight for too long on the opposite limb, causing a phenomenon called "supporting-limb" laminitis.



Related Content: The Latest on Supporting-Limb Laminitis

"Consider putting these horses in a sling so they can take weight off that foot," suggests Walsh. With your veterinarian's direction you can also try to get horses with leg injuries out of the stall to move around. "Even if the horse is hopping, it's producing enough movement to prevent laminitis from occurring."

On the flipside, a horse that picks his feet up too often might also be showing early signs of laminitis, van Eps says. "Horses normally shift their (weight between) feet about two or three times per minute," he says. "We noticed an increase of three to five times that weight-shifting when they were developing laminitis."

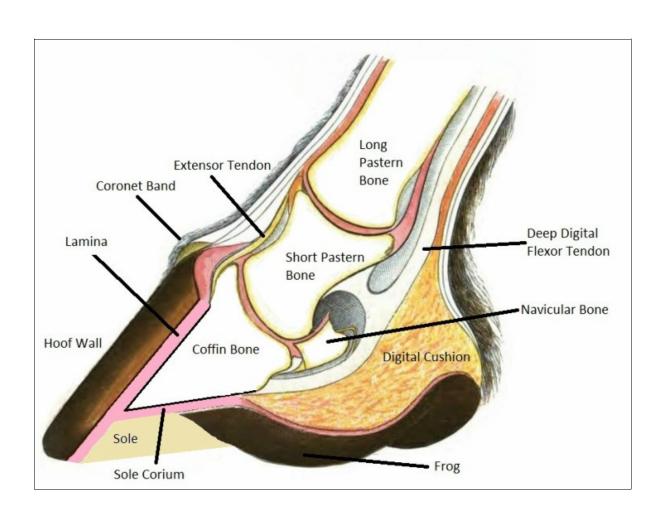
If the feet get painful enough, the horse will begin to change his stance, shifting his weight back to his haunches, along with stretching his legs out in front of him in the classic laminitis pose.

## 6. Apparent stretched and/or bleeding laminae

As laminae start to stretch, they separate from the hoof wall, explains Walsh. A gap becomes visible along the white line, where the sole and hoof wall meet. This white line widening is known as "seedy toe," and you can see evidence of this in the trimmings from a laminitic horse's foot during a farrier visit. He adds that if you notice spots of blood in the white line when you pick up your horse's foot, it doesn't mean your horse has been quicked by the farrier; it means the laminae are hemorrhaging, which is a sure sign of laminitis.

Owners can check trimmings each time the farrier comes and begin to recognize what's normal and not normal for their horses—something farriers might miss, says Walsh.

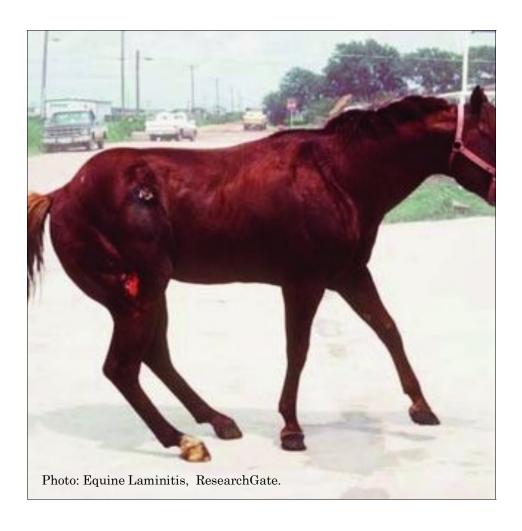
Laminar stretching also increases the distance between the external hoof wall and the front of the coffin bone, which can be seen on lateral radiographs (X rays), says van Eps. "That space is normally 18 mm, but it will increase as the laminae stretch," he says. "There won't be any rotation of the bone yet, just that legthening that could go to 20, 21, sometimes even 22 mm." Photo: Wordpress.com



#### 7. A shortened stride

A laminitic horse starts shortening his stride before he begins limping, says Ryan. Stride changes are more obvious on hard surfaces, especially when turning at the walk.

"Not many other conditions will make a horse lame on a circle on a hard ground at the walk in both directions," van Eps says. Know your horse's typical stride length at the walk so you'll recognize when those steps get shorter. And watch for signs of pain when the horse turns at the walk; these can range from the horse pinning his ears to a reluctance to move. "A horse that looks fine on a straight line on soft ground could look very different on hard ground in a circle," he adds.



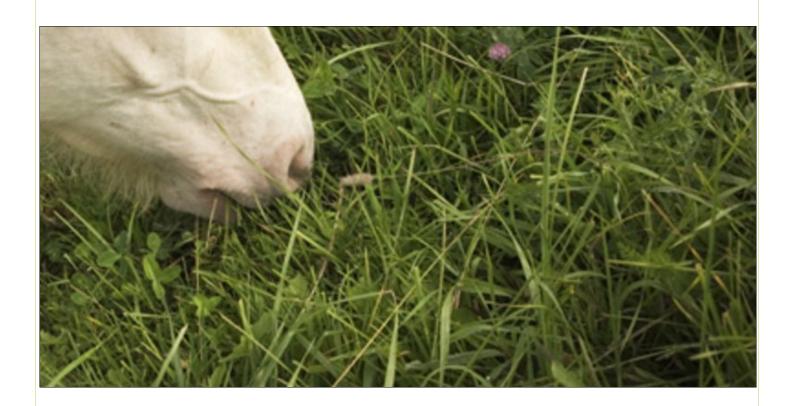
#### 8. Increased Insulin Levels

Insulin, a normal hormone released in the body to regulate blood sugar, activates a particular growth factor (IGF-1) in the laminae, causing them to grow. "But the laminae aren't supposed to grow," Walsh says.

A basic insulin reading by a veterinarian should show 20 units or lower, Walsh says. If it's over 40, you need to take action to get that insulin down before laminitis hits. In the "gray area" between 20 and 40, Walsh says he recommends performing an oral glucose test, in which the horse receives a weight-calculated dose of corn syrup that causes insulin levels to spike. In healthy horses these levels should return to normal within 60 to 90 minutes. In <u>insulin-resistant</u> horses they'll stay elevated for much longer.

If your horse is already experiencing a bout of laminitis, however, it's important to wait until it has subsides to test for IR.

Walsh says he sees "storms" of laminitis cases caused by high insulin in spring, when horses are turned out on sugar-rich pastures. Even so, rich spring pastures won't affect all horses—just those genetically inclined to insulin resistance. These animals need low-sugar diets and plenty of exercise—even if they're laminitic—to lower their insulin levels, Walsh says.



## 9. Obesity



**Understanding and Managing Equine Obesity** 

An obese horse is more likely to be an insulin-resistant one, say our sources. Obese horses' feet also bear more weight, which contributes to the mechanical changes in hoof shape. "Physical weight could cause the hooves to grow abnormally," says Ryan.

The excess weight can also send conflicting messages to farriers, says Walsh. "A lot of farriers will think the horse is wearing his feet down from being overweight," he says, when in reality, "the horse is breaking his foot down, not wearing his foot down, due to first the stretching of the laminae. Then the excess weight helps to break the foot down."

First and foremost, it's important to recognize if your horse is fat. "Owners are generally blind to how overweight their horses are and don't appreciate how much they're overfeeding," says Ryan. And, secondly, reduce the horse's calorie intake and increase his exercise, Walsh adds.



# 10. Diarrhea, infection, or inflammatory response

Systemic inflammatory responses can trigger laminitis, says Walsh. "If the horse is developing a high fever and diarrhea, then laminitis is next on the plate, and you have to be proactive in thinking about that," he says. "These horses are engaged in massive destruction of the laminae, which occurs because of enzyme reactions in the feet due to the inflammatory response."

A good way to keep laminitis at bay in these types of cases is <u>packing the horse's feet in ice</u>, Walsh says. Work with a veterinarian to keep the horse's legs at a maximum of 41°F (5°C) all the way up to his hocks and knees, starting immediately. If you wait to do this until clinical signs of laminitis appear, you're often too late to prevent damage.

#### **Take-Home Message**

Laminitis starts at a microscopic level well before actual lameness sets in. Careful horse owners can learn to recognize the subtle signs caused by microscopic changes, call their veterinarian, and take steps to prevent the laminitis from worsening. Although these microscopic changes might not be reversible, it's possible to stop the disease before it becomes debilitating. "Laminitis is all about ameliorating or halting the progression," van Eps says. "If it's very early and quite mild then you can go on to have a horse with no functional disruption."

Researchers recommend getting an idea of what's normal for each horse—how he walks and turns, how he stands, what his posture is like, and his normal hoof temperature and heart rate. "Once you do that," van Eps says, "you'll be well-equipped to detect what's not normal and instigate change."

# About the Author—Christa Lesté-Lasserre, MA Christa Lesté-Lasserre is a freelance writer based in France. A native of Dallas, Texas, Lesté-Lasserre grew up riding Quarter Horses, Appaloosas, and Shetland Ponies. She holds a master's degree in English, specializing in creative writing, from the University of Mississippi in Oxford and earned a bachelor's in journalism and creative writing with a minor in sciences from Baylor University in Waco, Texas. She currently keeps her two Trakehners at home near Paris. Follow Lesté-Lasserre on Twitter @christalestelas.