

A Case for Treatment Quicksand

Veterinary Forum • July 2019



by Melinda Newton, DVM

This series, which will appear occasionally in *Endurance News*, highlights real stories of equines treated at endurance rides. The narrative was constructed from interviews with the rider and the veterinarian involved, with many details taken from an unpublished account written by the rider. The author has used the rider's words wherever possible. The author and rider hope this article contributes to the education of riders regarding the treatment of endurance horses, and to the transparency of the process.

Trail accidents at endurance rides that cause injury—or even death—are rare. But occasionally an unlucky horse needs the help of the ride veterinarian that goes beyond colic, dehydration, or minor injury treatment typically seen at rides. In this case, a treatment veterinarian with large animal rescue experience made the difference between a horse featured in this series and a fatality report.

Lucy Trumbull was an experienced endurance rider, with 4635 miles and 18 seasons when she crossed the starting line at a 100-mile ride held in Northern California in 2017. She remembers, “The weather was perfect and the trail wonderful, with the best footing I’ve ridden on all year. Fergus felt fabulous and strong.” Fergus is a 14-year old Tennessee Walking Horse and Arabian gelding cross, who had 1550 miles at the time of this ride. This would be his ninth 100-mile ride.

Eleven and a half miles from the start, Lucy and Fergus wound their way down a steep wooded bank on a new trail marked with pink ribbons. Lucy was following the hoof prints of a friend’s horse, traveling just ahead and out of sight. Unfortunately, Lucy missed the marked, ribboned trail veering right, and Fergus eagerly followed the footprints of his buddy that led left, through a clearing.

Later it was determined that a large bear had broken through the trail at that location, creating the clearing in the underbrush, which was not there when the ride manager

had marked the trail earlier.

Stepping through the clearing, Lucy and Fergus took three steps onto what looked like firm sand, only to have Fergus immediately sink in mud up to his belly. Lucy dismounted and sank to thigh-high. “The mud was unbelievable sticky,” Lucy recalled. “I couldn’t get my leg out without crawling on my hands and knees, so there was no way Fergus was getting out. There was just no bottom to it.” It was a scene from a cliché western movie. Lucy and Fergus were stuck in quicksand.

Lucy’s friend, whose hoof prints led down to the quicksand, had also gotten stuck. Their adventure was mercifully short, as her friend’s horse was able to get out with a couple of lunges. Lucy thinks that the difference was the other horse was a “smaller and a more squirrely horse than Fergus, who at 1250 pounds is more like the *Lusitania*. I also

suspect [the other horse] was just a bit closer to firmer ground.”

Fergus struggled to get out of the quicksand, but his thrashings pushed him further downstream and deeper into the quicksand. Other riders stopped and, after calling the ride manager, attempted to help by pulling with ropes, and shoving sticks, stones, and anything any else available around and underneath him to help him gain traction.

Lucy recounts their efforts while they were waiting for help to arrive. “Whenever he thrashed, we’d try to pull him towards firmer ground, but he was so strong he almost pulled [another rider] in after him. I was behind him and almost ended up under him several times because I couldn’t get out of the way, and I was stuck in the mud myself.

We dallied the rope to [another horse], who tried hard to pull Fer-

EVR - Your TEVIS Headquarters!

Tevis is right around the corner and we are ready. Can't wait for ALL the riders to come to the store!



ECHO VALLEY RANCH, INC.



HAY, FEED & PET SUPPLIES

Good Luck Midnight Riders!
See you at the Finish Line!



STOP BY AND SAY HAY TO HI HO ECHO & JESSICA AND
CHECK OUT THE TEVIS QUILT, GREG'S MOM, JEANNIE MADE!

See coupon on page 5 for 20% off your purchase!

gus out, and nearly got flipped over backwards for his efforts . . . he started to sink too, so we abandoned the idea.”

Out of desperation Lucy called 911. Despite no cell phone reception at the ride, Lucy had decided to carry a cell phone, and by some miracle she had service. “I told the dispatcher I needed about six burly men with ropes.”

Fortunately Lucy’s “six burly men with ropes” turned out to be the Southern Trinity Volunteer Fire Department, who arrived about 45 minutes later to assist with the rescue. Lucy recalls that group member told her later that a different nearby organization had gotten a grant for large animal rescue training less than a week prior. But some of them saw it as a waste of money and griped that the funds should have gone towards a different purpose, since they would never need those skills. “They were sheepishly laughing because not even a week later, there was a horse stuck in a bog. They definitely saw the irony.”

Dan Chapman, DVM, the treatment veterinarian for the ride, arrived and evaluated Fergus. At this point Fergus had been trapped in the quicksand for an hour and 20 minutes and was shivering violently. Normally, horses are a low risk for hypothermia because of their large body size. A large animal has proportionally less surface area per body mass, which makes moving heat from the core to the skin surface—where it can dissipate into the environment—less efficient than in a



smaller animal. This is bad news for a horse trying to do a hot endurance ride, but good news if they are stuck in the mud.

However, in this case the quicksand was located in a small stream that was fed with constant cold water. Contact with water accelerates heat loss and Fergus had been lying in the cold water for a long time. If hypothermia is allowed to progress, the cells in the body stop working and the heart will slip into an abnormal rhythm, eventually ceasing to beat. Fergus was getting cold, and it was time to get him out.

Before attempting to pull him out, Fergus was untacked because the mud-covered saddle and saddlebags were dragging him backwards every time he tried to lunge forward. Dr. Chapman, experienced with large animal rescue techniques, reviewed the “where and how” to pull on a horse with the volunteer group before getting started.

A block and tackle was attached to a tree

and then hooked onto Fergus’s rope halter to keep him from moving further downstream. This was something Lucy and the other riders had tried to do by hand for over an hour but, as Lucy puts it, “No, a 150-pound person cannot hold 1250 pounds of horse.”

After Dr. Chapman dug out the horse’s front legs to get them in the proper position, the team was ready. With a heroic effort from both people pulling, and horse flailing, Fergus came up out of the mud “like a creature from the black lagoon,” and found the edge of the sand bar. Fergus was free.

A blanket was thrown over Fergus’s mud-caked body as he stood shivering. Fortunately, he quickly warmed up, hollering for his buddy that had been sent down the trail to finish the ride. But even though Fergus was on firm ground and warming up, it didn’t mean all was well.

Shock is a common term that describes several different medical conditions, all related to blood and oxygen not getting to the right places in the body. It can be caused by anything that severely—and usually suddenly—affects the amount of blood the heart is able to pump, the total amount of blood in the body, or where the blood is located in the body.

Fergus wasn’t losing blood from a large hemorrhaging wound and his heart was fine; however, he was at risk for a type of shock called neurogenic shock, in which the blood is suddenly moved away from vital organs such as the brain, heart, and kidneys. This type of shock can occur following severe trauma, pain, or emotional stress.

In these situations, the fight-or-flight autonomic nervous system over-responds by quickly discharging, which floods the body with molecules that suddenly relax the peripheral blood vessels. The blood pools in these peripheral vessels, leaving essential organs such as the brain, heart, and kidneys stranded. If the animal cannot correct this quickly enough, or if the shock is severe, the animal will die.

Treatment is directed at rapidly restoring blood flow in the body by giving intravenous fluids, and using drugs that support cardiovascular function.

Dr. Chapman evaluated Fergus, determined he did not require immediate treatment for shock, and was stable enough to be transported to ride camp. But, the first responders were concerned about Lucy, who

Because We Owe Them Healthy Hooves

Say farewell to Thrush & Hoof Wall Separation with Pure Sole Hoof Mud

- Tested and recommended by trimmers & farriers.
- 100% natural, safe, & effective
- Toughens tender soles



Go on... Spread the Mud

PureSoleHoof.com
805.448.0390

Use promo code **ENDNW** for **FREE SHIPPING**

was also at risk for shock, as she had “turned a funny color.” But after warming her up and watching her closely as the adrenaline in her system dissipated, Lucy was also cleared to go back to ride camp.

At ride camp, Dr. Chapman completed a physical exam of Fergus. He miraculously escaped the incident with only a few small abrasions and a sore neck, and he did not require treatment beyond flushing his eyes to remove the gritty mud.

Lucy feels extremely lucky that she and Fergus survived the incident with merely a rider option pull that day. “Because Fergus kept pushing himself further and further downstream during his struggles, my biggest worry was that he’d push himself, face-first, into the deeper part of the creek where it met the river and drown, and that I was going to have to go in ahead of him, chest deep, and try to hold his head—which is suitcase-sized—above water.

“Thankfully that didn’t happen,” she said, “but that was my biggest fear; that he was my responsibility, and I was the person who was going to have to do it, and that I wouldn’t be physically strong enough to keep his head up, and that he’d drown because I was insufficient.”

Although quicksand may be an improbable incident at most endurance rides, traumatic events do happen on the trail. When faced with something that only happens in the movies, the smartest things a rider can do are: get help, not make the situation worse until help arrives, and stay safe. The rider and ride manager make the following suggestions based on their experience at this incident.

1. Always pre-program the ride manager’s number in your phone, even when you aren’t sure you’ll have coverage.

2. If you carry a GPS, learn how to read your coordinates from it. GPS coordinates can pinpoint your location and help people get to you faster.

3. Although the local law enforcement was aware that the ride was going on, and the sheriff had seen the ride map during an earlier meeting, the fire department said afterwards it would be really useful for them to have a copy of the ride map, so they would know where riders were going to be.

It was only later that long-term effects of Fergus being a stick-in-the-mud became apparent. His next ride, five weeks later, was “the worst ride I’d ever had on him,” recounts



Lucy. Despite chiropractic evaluation and time off, Fergus wasn’t quite right for most of the year. He returned to complete two more 100-mile rides; however, he was pulled for lameness at a third and diagnosed with an

inflamed sacroiliac bone spur.

Fergus is currently recovering in pasture, and it is unknown whether he will return to endurance competition.

In a recent tribute to the horses who contributed to the 5,000 lifetime endurance miles achievement Lucy recently earned, she describes Fergus as “probably one of the most outstanding horses I’ll ever have the honor to ride. Fergus is my one in a million.” We wish Lucy and Fergus the best in any future endurance ventures. ■

The author would like to thank this rider for sharing their story. Substantial portions of this article came from an unpublished account written by the rider, and any errors in the narrative are the author’s. If you have a story to share about a medical event at an endurance ride, and are interested in being featured in a future article, please email Dr. Melinda Newton at m.newtondvm@gmail.com.



Manage your respiratory tract problems with Hawthorne’s Wind Aid. The all natural ingredients were designed to aid in the relief of coughs, allergies, and other minor breathing problems. Wind Aid soothes and coats the throat, reducing inflammation and mucus to open air passages. Better breathing results in more comfort, confidence, and better performance for your horse.... breathe easy with Wind Aid.

@HawthorneProd Hawthorne_Products HawthorneProducts



Visit hawthorne-products.com or call 800.548.5658 for more information