Have Attitudes Toward Using the Equinosis Q in Pre-Purchase Exams Changed?

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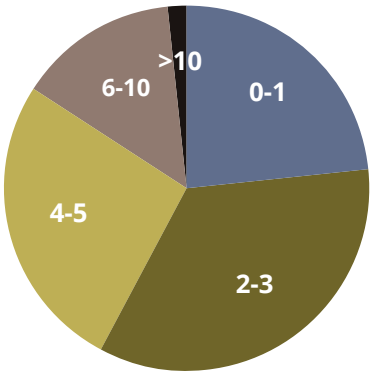
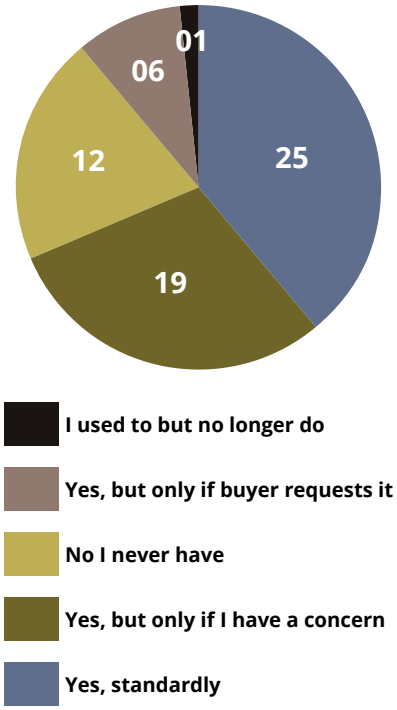
The Equinosis Q with Lameness Locator has become a more readily accepted diagnostic tool for detecting lameness, both subtle and overt, in the 11 years since its commercial launch. Though respected as a modality to ensure the health and wellness of competition and racehorses, some veterinarians are hesitant to use the tool during pre-purchase exams (PPE). This trend was apparent during a survey conducted by Equinosis in 2019, but what, if anything, has changed?

No. of PPEs Performed Per Month (64 respondents)



In a recent poll of Equinosis Q users, 64 practicing veterinarians responded. 22 vets (34%) performed between two and three PPEs each month and 17 vets performed between four and five PPEs a month. Nine vets completed between six and 10 PPES monthly and 15 did no PPEs or just one. One vet completed more than 10 PPEs each month.

Do You Use The Equinosis Q In Your Pre-Purchase Evaluations?



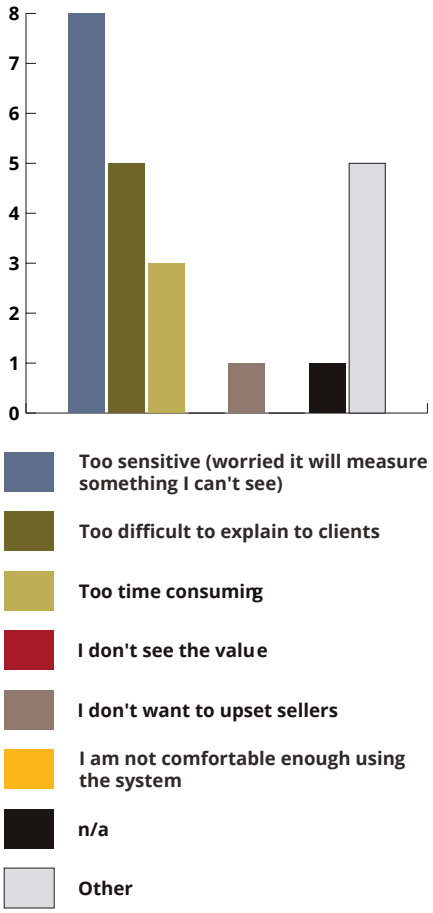
In total, 25 (39%) of all the vets polled utilized the Equinosis Q regularly while 19 vets (30%) used the equipment specifically if there was a concern. 6 vets (9%) would use the Equinosis Q in PPEs, but only if a potential buyer requested it. 12 vets (19%) reported they have not used it in a PPE.

Interestingly, every vet polled said he or she sees the value of such a diagnostic tool – so why then, are they reluctant to use it? The No. 1 reason eight vets (12.5%) reported they are reluctant to use the Equinosis Q is they felt it was too sensitive and would measure something they (the evaluating vet) could not see. Only five vets (8%)

felt that the system was too difficult to explain to clients, a decline from when the survey was first done in 2019.

Compared with 2019 responses, where 19 of 88 veterinarians (nearly 17 percent) were concerned the system would detect something their eyes would not, the 2021 responses denote that confidence in – and familiarity with – the machine is growing. So why is the Equinosis Q not used in every PPE?

Reasons for Not Using the Equinosis Q During a PPE



Some practitioners feel that the Equinosis Q is too sensitive for pre-purchase examinations and is best reserved for harder-to-diagnose lameness and conversations with established clients, with whom they have developed a repertoire and a level of trust. These veterinarians are concerned that the Equinosis Q might locate an asymmetry on a PPE that is undetectable by the eye and complicate what might otherwise be a straightforward exam.

Tensions can run high during pre-purchase exams, both between the seller and the buyer; the veterinarian performing the exam – and certainly the horse – is privy to the escalations of emotions as expectations rise. The extent of a "standard" PPE can vary by potential owner and veterinarian, but often the depth of evaluation rises with the horse's asking price. Open lines of communication between vet and potential owners are paramount, as many factors come into play when deciding on a new steed, including age, breed, intended use, rider's competitive aspirations (if any), rider's current skill level, horse's history, and potential for resale. Because of all these potential constraints, the ability for the vet to explain his or her findings – and their clinical significance – is key. The Equinosis Q allows veterinarians to back up their opinions with evidence-based analysis. And in many cases, that same veterinarian will be responsible for the horse's future medical care. Acquiring a wellness baseline is a good starting point.

Is Any Horse Actually Symmetrical?

It's clear to those who understand the technology that the discovery that a horse moves asymmetrically is not often one of dire consequence; it does not mean that the horse may be unserviceable in its intended use.

Successful use of the Equinosis Q in PPEs lies in the ability of the attending veterinarian to explain the findings in a contextual way, including offering an opinion on possible risks or management issues related to the horse. The information provided by the system must be distilled down into a context the client can understand.

Dr. Rhodes Bell, an equine surgeon with Park Equine Hospital at Woodford in Versailles, KY, uses the Equinosis Q on every lameness evaluation of a horse that has a score of less than a 4 on the AAEP lameness scale. He also uses the tool for all pre-purchase exams.

An avid proponent of using the Equinosis Q to augment his physical exam, Bell is able to explain how the diagnostic tool works immediately after its conclusion. "I have the explanation on a loop in my brain, which I feel has been fine-tuned over the years to explain what I am

seeing and how this is represented in the data output of the software," he says. "I try to explain that it is not voodoo or magic, it simply puts a number on what any good veterinarian is already observing but is not subject to bias (or having a bad day!). I also explain that it [the Equinosis Q] is more sensitive than the human eye by virtue of its increased sampling rate."

Interestingly, doing a PPE for someone he doesn't know, which happens often, increases Bell's desire to use the equipment. A potential buyer's opinion on whether to pass on a horse often lies in the hands of the vet, Bell notes. "I can say that if every horse that has asymmetry measured during an evaluation was passed on, they would have a very, very tough time finding a horse for purchase."

"I love when no asymmetry is measured [by the Equinosis Q]," says Bell. "I find PPEs stressful, and I explain that the machine's ability to find no asymmetry is a very rigid bar to pass. I have a stock phrase for it: I now have to use my toes, but I can very easily count the number of horses that come up as 'sound' in all regards," he says. In addressing the horses that come up not perfectly symmetrical, Bell notes that "The important part is to interpret the meaning of the data correctly – why is the horse asymmetric? Is it just the way the horse moves or is there some pathology contributing to that? Is this a transient issue? A treatable/manageable issue? What further diagnostics do we need to do to answer those questions?"

> Bell concludes that "In my opinion, measured asymmetry is not a reason to pass on a horse, it's a reason to look into things a little deeper. The findings of that investigation should dictate your feelings surrounding the data that is generated by the equipment."

Though Bell feels the equipment is a wonderful adjunct to lameness and PPE exams, he's not surprised the device is not in more widespread use because "the data sometimes can be confusing, even to me. I think the more one uses it, the more comfortable they are using it, which is one of the many reasons I use it on most--if not all--cases."

Equinosis Q Use Overseas

The use of the Equinosis Q differs between continents and countries, says Dr. Christina Frigast, a veterinarian based in the UK. Frigast has seen a variety of racehorses, pleasure horses and sport horses during her career, and notes that the use of the Q is "a lot more recognized and accepted for use in lameness investigations in recent years in the UK." In 2016, there were only five systems in the UK; now there are more than 35.

Though she primarily uses the Equinosis Q for lameness diagnostics, including multiple-limb lameness and monitoring of competition horses, she also uses it to help decipher why a horse is performing poorly. Frigast doesn't use the Q often in pre-purchase exams, but she does use it when she finds a horse has an obvious lameness (on a PPE) to avoid any argument or disagreement. She also uses it for a "second opinion" where asymmetry is seen, but she's unsure whether it's consistent and/or of concern.

For Frigast, if she's going to use the Equinosis Q, she prefers that her client at least be familiar with the machine and/or the principles behind gait analysis systems so they understand how the results are interpreted. Though the Equinosis Q offers information, the vet will need to answer if the asymmetry measured is significant and going to cause problems in the future, she notes.

"I think this does put off a lot of vets from using the Q in a PPE if they don't feel confident interpreting the results of more complicated cases – you rarely have an obvious lameness in a PPE, so it is bound to be a bit more challenging to interpret the Q reports," Frigast explains. "In the UK, a five-stage PPE includes ridden exams, so you would get Q reports for both straight line, flexions, lunging and ridden trials, which all adds information that can help you determine if an asymmetry/lameness is significant."

Additionally, insurance companies in the UK will exclude [not insure] any Equinosis Q findings mentioned on the PPE report even if reported as an asymmetry and not a lameness. "I always make this clear to the client before using the Q as it is more likely to pick up an asymmetry than the naked eye. I haven't had to include the Q reports for PPEs or insurance claims, and insurance companies

seems to acknowledge the Q as a diagnostic tool." Frigast says that she has heard of a few European insurance companies wanting an explanation of what the Equinosis Q is before agreeing to pay for its use.

Because of this, Frigast doesn't feel that the Equinosis Q should be used in every PPE she performs. "A degree of asymmetry will have to be accepted without exclusions being made" before she can recommend the device be used more often, she explains.

Equinosis Q in a PPE? No Way

Dr. Fernando Cardenas owns and operates the 3H Equine Hospital and Mobile Veterinary Services in New Hill, NC, on the outskirts of Raleigh. He is familiar with the Equinosis Q and uses it every day in his sports medicine and rehab-focused clinic. "We find our clients love it," he says. He finds the tool extremely useful for horses that are injured, allowing the team of vets to gauge objectively how the horse is progressing through his rehabilitation.

It took a while for him to get his clients – and his dad, Fernando Cardenas Sr., a famed trainer and breeder, and former international dressage competitor – on board with the system. "New anything can be tough," Cardenas says. "When I told my dad of the technology, he did not embrace it. But the data the Equinosis Q gives is irrefutable," he says.

Though Cardenas appreciates everything the Equinosis Q can do, he will not use it in PPEs. "My own horse is a great example," he explains. Quincy Car, a showjumper that competed in the 2018 FEI World Equestrian Games in Tryon, NC, always shows up with a left hind lameness on the Equinosis Q. But he's not clinically lame," Cardenas explains. "He's not lame to the rider or the trainer and his performance is great. Some horses are simply naturally crooked, which shows up as an asymmetric gait."

> "Beginner buyers lock on to that [idea of asymmetry] and you have to record the clinical impression on that leg, though the horse may never have had an observable lameness on that leg," he says. "PPEs are already difficult; they can be frustrating for buyers, sellers and veterinarians as is. Adding in [the Equinosis Q] can really complicate things."

Q Inventor Kevin Keegan's Take

"There are many causes of the clinical sign of lameness: some bad, some not so bad, some completely incidental," says Dr. Kevin Keegan, Professor of Veterinary Medicine and Surgery at the University of Missouri and part of the team who invented the Equinosis Q. "This is when and where one's continuing education, clinical experience and judgment are vital. Regular use of the equipment in lameness evaluations will increase confidence in handling these situations".

"I am aware that there are instances when use of the equipment may make the [pre-purchase] evaluation more difficult, but I think they are outweighed by those where the equipment reinforces my subjective opinion, supplying a veterinarian with evidence to support their clinical impression. In most cases, the information is helpful rather than detrimental to the process," he continues.

> "Here is the bottom line for me: I want to know everything I can to give the buyer the best advice and service. In this respect, I would not shun any information potentially relevant to the evaluation. I am confident that I will be able to clearly express my interpretation of the importance of any abnormality, whether it be lameness evidence from the Lameness Locator or radiographic evidence. It is more likely for a veterinarian to be looked at unfavorably (and possibly sued) concerning a pre-purchase evaluation because something was missed and not because something was found and interpreted to be unimportant," he concludes.

A Note on Equinosis Q Reporting

It's important to keep in mind that some asymmetries the Equinosis Q measures may not be due to pain; the asymmetries could be coming from how the horse jogs in hand, surface variations, the horse's abnormal conformation or neurologic issues. It is the veterinarian's responsibility to communicate this to the client who has requested the PPE.

Some vets record Equinosis Q findings in their reports in ways that indicate that the system measured something

the vet did not see or associate with any clinical significance. It might be noted in a way that states the Equinosis Q measured a lameness that the vet is unable to subjectively observe and therefore presents unknown risk. Options to investigate the finding can be offered and should be noted in the report whether they were accepted or declined.

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