## Best athletes deserve the best care

Offering excellent image quality and speed, Agfa's digital radiography solutions with dedicated MUSICA<sup>™</sup> image processing help Alessandro Centinaio keep horses in tip-top health in the stable and the arena.

**CASE STUDY** Dr. Alessandro Centinaio Clinica della Brughiera, Cardano al Campo (VA), Italy



# Case Study

INTERVIEW WITH: DR. ALESSANDRO CENTINAIO VETERINARIAN AND OWNER OF THE CLINIC

Agfa continues to move forward, and I am moving forward with them.

**Dr. Alessandro Centinaio,** Clinica della Brughiera For equine veterinarian Alessandro Centinaio, horses are a family affair: "My whole family is involved with horses, as riders, competition judges, etc. So, after a first experience working as a general veterinarian in the early 1980s, it made sense for me to focus on these magnificent animals – which I consider to be the best athletes in the world."

Today, Dr. Centinaio is renowned as an expert in equine orthopedics. But his reach – and his 'horse family' – stretch far beyond that. He quickly became involved in the world of competition, working for the Italian Federation for 12 years, and acting as team veterinarian for four Olympic Games and four World Equestrian Games.





### Robust imaging in demanding circumstances

It was during these first years working on the competition circuit that Dr. Centinaio had what he said was a 'crazy idea': a mobile ambulance for horses. "Today, it seems 'normal', but 30 years ago, it was completely unheard of," he explains. From this brainstorm were born both the Horse Ambulance Group, which offers 24hour emergency service, and the Mobile Clinic, which provides a series of services for horses at competitions.

And a new 'family' was formed when he began working for the Longines Global Champions Tour (LGCT) in 2008. "My main concern is always the wellbeing of the horses, and I was speaking with founder and president Jan Tops about using my mobile set-up for the tour. We agreed the best way to achieve this, would be to bring in sponsors – but we could not compromise on the quality of the equipment! And that is where Agfa came in." "X-ray is a priority in emergency care, so Agfa is the perfect sponsor for our LGCT initiative, making sure we have top-quality computed radiography (CR) and direct radiography (DR) imaging solutions. And since we work in the rain, the heat and the cold, the sponsorship gives them a unique opportunity to see how their equipment performs in the field (literally), under real, difficult environments."

Never – not once! – have we received feedback that an image from the

Agfa DR or CR is not good quality.

**Dr. Alessandro Centinaio,** Clinica della Brughiera

## Mobile veterinary imaging excellence

Today, Alessandro Centinaio is no longer the vet for the Italian team. Instead, he is one of the official vets for the World Equestrian Games. "And I was honored to be selected as a supervisor for the Tokyo Olympic Games, which were held in 2021. It was a fantastic experience, and I was delighted with the opportunity to share my own knowledge with my veterinarian colleagues."

Throughout these changes, Dr. Centinaio remains convinced that Agfa offers the best material for veterinarians, and that the DR system is sufficient to do the work in the field. His job at all the competitions is to protect the horses: to check their welfare and safety.



There are now two Mobile Clinics, fitted with, amongst others, a laboratory for blood work, an ultrasound, and the Agfa DR and CR X-ray systems. "For our mobile work, both CR and DR offer advantages, and both provide excellent image quality. About 90% of the images can be handled by DR, which gives us practically instant images. Speed of imaging is important for the welfare of the horse. What's more, it's hard to get a horse to stay still for long. With DR, we don't have to tranquillize the horse, and it also makes our job much easier."

At Dr. Centinaio's clinic, Clinica della Brughiera, speed is also an important asset. Competition horses, for example, are extremely valuable. So, when purchasing a horse, many buyers ask to perform a full set of X-rays: multiple navicular, stifle, carpal, neck, back, etc. images. In total, about 24 X-rays per horse. DR has reduced the time for taking the full set of pre-purchase images from 1 hour, to 20 minutes.

"But if a horse is injured in the arena and we need to take images without moving the animal, then CR is more appropriate. We take the imaging plates to the horse, use a mobile generator to make the images, then return to the truck to digitize and view them. The system is robust and easily transportable."

DR has reduced the time for taking a full set of 24 equine pre-purchase images from 1 hour, to 20 minutes!

**Dr. Alessandro Centinaio,** Clinica della Brughiera

#### Mobile DR Solution

The Mobile DR solution is ideal for use 'in the field'. Based on the 10x12" (24x30cm) DX-D 45C, it offers the compact size most convenient for equine care. The cesium iodide detector technology delivers the high image quality at the lowest dose, while the Automatic Exposure Detection (AED) allows seamless use with X-ray systems. Wireless image transmission makes it easy to work in the stable, or elsewhere, while providing 'instant' imaging. The solution comprises a notebook computer with the MUSICA workstation software and MUSICA image processing software, all transported safely in a rugged carrying case.

#### CR 15-X digitizers:

Affordable, compact computed radiography solution with mobile generator.

#### Dedicated MUSICA image processing for large animals:

- Analyzes each image and automatically applies the appropriate image enhancement parameters independent of the exam type.
- Gives a clear view, even through thick and dense horse muscle mass.



### MUSICA image quality makes the difference

However, says Dr. Centinaio, when dealing with these cherished animals, the most important aspect is always image quality. "The owners of these horses have made a big investment; usually they also have a 'personal' vet who oversees the general care of the animal. If we take X-rays at an event, we need to share them electronically with that vet. And never – not once! – have we received feedback that an image from the Agfa DR or CR is not good quality."

This image quality is critical for the welfare of the horse – at that moment, but also in the long term. The most important X-ray is the navicular bone, he explains. Navicular syndrome can cause chronic lameness in horses, so it's important to diagnose as soon as possible. "If I don't take a good image, it can impact the horse's future in a serious way."

But, says Alessandro Centinaio, quality doesn't come only from the hardware: "If you put a Fiat Panda engine in a Ferrari, you won't get the same engine performance. The monitor, the plates, etc. are also very important to the image quality. Veterinarians don't always pay attention to this."

And the real key, for Dr. Centinaio, is the newest generation MUSICA image processing. "I can tell an image made with MUSICA: it looks different. The borders in the structures are more 'natural', for one thing, and there are no artefacts. Soft tissue, hard tissue... there is almost too much information! But it is exactly what I need for analysis. MUSICA makes the difference."

## Service, support and a listening ear

The other differentiator that has made a dedicated Agfa customer out of this world-renowned expert is the relationship he has with Aqfa, and their shared spirit of innovation. "It's not just about service – although the service I get from Agfa's headquarters is excellent! But they work with me, they listen to me and my ideas," says Alessandro Centinaio. "It's not my role to create solutions, but I bring experiences to them, and we talk about possible solutions. Then Agfa gets to work to make them happen. They keep working to make sure that I have what I need. And these innovations change the face of animal care: like having such a good quality image of that navicular bone. Before, we wouldn't have had that clear image, that information. We didn't even know what we were missing. But now we do. Agfa continues to move forward, and I am moving forward with them."





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