



# Dog's best friend

For busy Finnish animal clinic, the mobile DR 100e with MUSICA 3 image processing provides exceptional image quality – while speeding up imaging, diagnosis, planning and care

**Case study: Kuopion Eläinlääkärikeskus**  
Kuopio, Finland

**AGFA** 

# Case Study

## INTERVIEW WITH:

**SINIKKA SARPANEN**, KEK CEO, DVM

**SAARA LAUNONEN**, VETERINARY NURSE

Dogs may be man's best friend, but when they are sick or injured, the tables turn and the family vet quickly becomes the best friend a dog can have. In Kuopio (Finland), the Kuopion Eläinlääkärikeskus (KEK) animal clinic provides high-quality, holistic healthcare to companion and working dogs, as well as other family pets. KEK specializes in orthopedics – including fracture, knee and spinal surgery – and often receives referrals from around Finland. So fast, high-quality imaging is a must. Agfa's mobile DR 100e, MUSICA 3 image processing and SE Suite for image archiving and distribution are helping KEK meet the organizational and care challenges of a busy clinical environment.





“We can do continuous imaging in one room, while veterinarians are viewing images in four other rooms.”

Saara Launonen



## A DEMANDING ENVIRONMENT

"We see around 1000 patients each month, nearly 75% of which are dogs: pets, hunting dogs, working/agility dogs and service dogs (police, security, armed forces, etc.). Cats make up about 20% and then the rest are exotics, which are usually even smaller in size," explains veterinarian Sinikka Sarpanen, KEK CEO and DVM.

The clinic opened in 1999, the same year the city closed its public animal veterinary services: "It was the right time to open a well-equipped, private clinic," Dr. Sarpanen continues. "With 5 vets and 6 veterinary nurses, we are a mid-sized facility for Finland, but large for the area. We treat animals from all over the country, but most come from Eastern Finland and Lapland."

While KEK is a full-service clinic, including holistic treatments, dental care, etc., its specialty is orthopedics, attracting referrals for some of the more demanding examinations and treatments. "We see dozens of orthopedic patients every week, and about 5-10% of those require surgery, especially for fractures and knee operations," Dr. Sarpanen describes. "We carry out about 15 radiology exams every day, for these and other patients: diagnostic, post-op and monitoring to check on healing. Our veterinary nurses are experts in imaging."

"We can take images of a standing awake dog, which is a big advantage... the dog walks into the X-ray room, the image is taken, and the dog can go right home. It saves time, enables a smoother work process, and is safer and less stressful for the animal."

**Dr. Sinikka Sarpanen**

## THE BENEFITS OF DIGITAL IMAGING

In this busy facility, a smooth workflow is key, both for the humans and the often-skittish patients. The clinic adopted digital imaging many years ago, with a CR 30-X computed radiography (CR) solution from Agfa. After years of heavy use, it was time to replace this system – so KEK became the first in the country to implement the DR 100e compact, mobile direct radiography (DR) solution.

"We needed excellent image quality, ease of use and smooth delivery, plus we wanted an archiving solution. But the most important criterion was reliability, including excellent support in the event of a problem." Thanks to its long-term relationship with Agfa, KEK knew the company could offer the right solutions – the DR 100e, MUSICA 3 image processing and SE suite – with installation, training and service provided by authorized Agfa distributor, Imaqen Ltd (Helsinki, Finland).

The advantages were felt very quickly in the fast-paced clinical environment. "The DR 100e sped up and boosted our clinical workflow: we have much shorter queues for imaging," comments Dr. Sarpanen.

Saara Launonen, a veterinary nurse, adds: "The veterinary nurses can take images in one room, while the veterinarians view them in four other rooms; this means we can take images continuously. And everyone can concentrate on their own duties (imaging, image processing or archiving) without interruptions and delays. This has been a huge benefit for our patients."



This X-ray, taken during the initial visit, shows that Niksu's right front leg is intact, and that the humerus condylus measures 1.6mm.

On 15/11/18, a humerus fracture was discovered in the left front leg of Niksu, a small 1.5 kg Russian Toy Terrier, requiring surgery to place an osteosynthesis plate and 1.5mm screws. Four days later (19/11/18), Niksu returned to the clinic after falling from the couch and injuring his right front leg, which also required surgery.



## MORE DETAILS, FOR BETTER CARE

The DR 100e has also enhanced image quality for diagnosis and care planning. "The images are unbelievably sharp," describes Dr. Sarpanen. "We actually had to relearn to interpret them, because there is so much more detail and information! This is important because if the image quality isn't good, it impacts our work."

The MUSICA image processing further supports the clinic's care of its diverse patients: "For instance, we can add measurement in the images to determine the thickness of bones, enabling us to correctly place implants. When we are dealing with a small patient, like a 1.5 kg Russian Toy Terrier, the bone thickness is only about 1.6 mm. The measurements and sharp image quality help a lot in such challenging surgical situations."

Both the original images and the images with measurements are saved into the SE Suite for archiving, enabling the veterinarian to easily access and view them during the surgery.

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**Dr. Sinikka Sarpanen**



DR 14e: Compact, wireless, cassette-less and easy to clean, the DR 14e Digital Detector with Automatic Exposure Detection (AED) improves workflow and exam speed, eases patient positioning and supports high-quality imaging even in challenging environments.

## STAND AND DELIVER

The mobility of the system opens new perspectives for the clinic. "We can take images of a standing dog, which is a big advantage," Dr. Sarpanen explains. "The diagnostics from a thorax of a standing dog are in a completely different class than from a sedated, prone dog."

Imaging the knee of a standing dog is very fast and easy, she describes: "A control X-ray of, say, a 90 kg dog after a tibial tuberosity advancement (TTA) knee surgery may no longer require sedation. Instead, the dog walks into the X-ray room, the image is taken, and the dog can go right home. It saves time, enables a smoother work process, and is safer and less stressful for the animal."

## RELIABILITY COMES FIRST

To ensure the benefits of the image quality and fast workflow, reliability and service are critical, Dr. Sarpanen insists. "We need reliable equipment to function efficiently and meet the needs of our patients. And in the event of a problem, we need good service. Imaqen Ltd., the Finnish distributor of Agfa, has very strong technical support: service and repairs are carried out without disrupting our work. They also have excellent on-site service resources, so the cooperation between all of us is very good. We bought a complete system with hands-on training, on-site service and technical support. We have reliable contact people who can guide and help us: not a 'faceless' email account. I give Agfa and Imaqen an 'A+' for responsiveness and attitude."

"In the end, helping our small animal patients is very inspiring, and with our Agfa solutions we are doing so with the best possible imaging technology, skilled and knowledgeable staff and reliable technical support."



## AGFA HEALTHCARE SOLUTION

### DR 100E



**Convenient handling and compact size** enable imaging of either awake or sedated animals.



Sharp images support the care of dogs and family pets of **widely varying sizes**.



**Smooth workflow** optimizes resources, and shortens time patients spend in the clinic.



MUSICA 3 image processing analyzes each image and automatically applies the appropriate **image enhancement parameters** independent of the exam type.



MUSICA Nerve Center provides **very fast image acquisition** and a smooth workflow, reducing animal stress.

### SE SUITE



Enables comprehensive archiving and distribution, while offering an **integral viewing functionality**.



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