

# **Digital Radiography**

## **The Advantages of Digital Radiography**

Virginia Equine is pleased to provide your horse with the latest, state-of-the-art imaging technology – the RapidStudy™ digital radiology (DR) system – from Eklin Medical Systems, the leader in digital radiology and image management.

### ***What is DR?***

Just as digital cameras have revolutionized photography, DR is changing the face of x-ray technology. Now, in less than four seconds, we can take a digital x-ray of your horse's injury or area of concern without waiting precious minutes to develop film. We know instantly whether we have good view of the target area or if we need to get another angle of it.

### ***How does DR work?***

A very sophisticated sensor panel is used along with a portable control monitor and standard x-ray camera which has been programmed to recognize the sensor panel. We position your horse's target area, e.g., stifle, between the x-ray camera and the panel. The x-ray machine creates an exposure on the sensor panel, which then can be viewed within four seconds on the Eklin control monitor located nearby. If the x-ray is acceptable, we will touch the monitor screen on the "accept" tab and proceed to the next view. Images are then routed to a high resolution workstation for complete evaluation and comparison with previous images taken with DR or other digital modalities. The time from start to complete finish of a radiographic exam can be reduced significantly by DR!

### ***Will my horse feel any discomfort and does he/she get exposed to a lot of radiation?***

The DR system creates no discomfort for your horse. Although there is still radiation applied, the dose is, in most cases actually lower, as well as quicker with the RapidStudy system. Patient movement is one of the more common reasons we needed to retake an x-ray in the past. Now, with the faster RapidStudy system, this problem has virtually been eliminated. In turn, your horse receives less exposure to additional radiation caused by having to retake radiographs based on untimely animal movement.

### ***Can DR help provide a better diagnosis for my horse?***

Like a digital photo, a digital radiograph can be manipulated after it is taken. This allows us to vary the contrast of the image, change the resolution or magnify areas of concern. Because of this advantage, we can see things on the digital image which a film x-ray just wouldn't allow us to before. We have actually improved our abilities to diagnose due to this capability. Also, we use the Eklin Digital Practice system which allows us to integrate any other digital images, such as MRI or ultrasound, with the DR images. This

helps us evaluate the area of concern more closely and bring additional technologies into our diagnostic process.

***What other advantages does DR provide for my horse?***

Your time is valuable as is your desire to achieve outstanding care for your horse. With the RapidStudy system, we can instantly get images, which lead to a more rapid and confident diagnosis. This means we can start treating your horse sooner. Quicker treatment generally results in a faster and more positive outcome. In addition, the stunning images we get from the RapidStudy system, coupled with the ability to manipulate the image, allow us to more easily and visually point out your horse's health issues. We consider you a valuable asset in the healthcare of your horse. The more you understand what is going on with your horse, the better chance for a happy, healthy horse.

***Does DR cost more?***

We are committed to providing you with the best technology available on the market. DR, like many of our other imaging modalities, isn't inexpensive. However, the value that this system provides far offsets the cost incurred in providing the "Best Medicine" that you have come to expect from us. With timely results, reduced patient stress and enhanced diagnostic capabilities, you can expect an actual savings with the use of digital radiography. We deeply believe this technology will significantly enhance the healthcare we provide and want everyone's horse to benefit from it.

We think you will agree that your horse deserves the best clinical care and technology available. Our mission is to provide both for you and your horse.