THE PRACTICAL ASPECTS OF DENTAL RADIOGRAPHY

DENTAL RADIOGRAPHY IS A GROWING FIELD in general veterinary practice, and rightly so. Dental radiography opens a huge volume of information that allows accurate decision-making regarding disease processes and treatment options.

For a long time, dental radiography was only used by those professionals who carried out advanced dental procedures. But now, in a straw poll of delegates attending various CPD events and lectures, my estimation is that perhaps a third of veterinary practices now have dental radiography. This article is going to look at some of the practical aspects of dental radiography, including different types of system that are available, and how best to get diagnostic images.

Dental radiography systems
As with standard x-ray systems, there are two broad categories of dental radiographic equipment for image capture. There are indirect (or CR) systems and direct (or DR) systems.

CR systems
CR systems can be further broken down into dental-specific systems (Figure 1) and systems used to adapt existing standard image capture cassettes (Figure 2; overleaf).

These systems utilise digital phosphor films, which are exposed to x-rays while positioned within the mouth. The film is then removed from the mouth and placed within a processor which reads the film and produces an image on a computer screen.

For each exposure, a barrier envelope is required to protect the film, which is then removed as the film is placed in the processor. For dental-specific systems, films are processed individually. For the adaptor cassettes, several films are mounted within a standard CR cassette which can then be processed together.

CR systems usually have more than one size of film, often with size 2 and size 4 films available. CR films have a lifespan of approximately one to two years depending on their use, as they will become scratched and will therefore need to be replaced.

DR systems
DR systems utilise a digital sensor which is connected to the computer by a wire, usually to the USB port (Figure

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