comparative imagery

Traditional Radiography versus Oral Radiography

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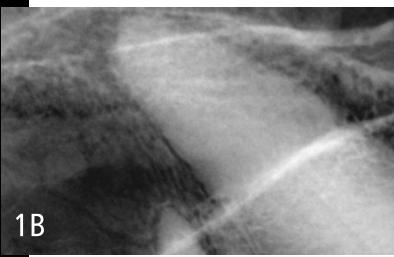
DENTAL IMAGES are best obtained with oral

radiography techniques using dental film or a digital sensor and a dental x-ray machine. Locating the dental radiographic unit in the dental operatory makes it quick and easy to take dental radiographs. The film is placed intraorally in most instances to help eliminate overlap of structures. The tube head is manipulated into the correct position for taking the radiograph.

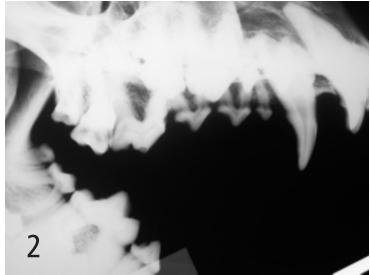
It is less convenient and more technically difficult to obtain high-quality dental images with traditional radiographic techniques. The radiograph machine is usually distant from the dental operatory, making it necessary to move the patient to obtain radiographs. Positioning is more difficult because the tube head is stationary. The need for extraoral film placement increases the difficulty of avoiding overlapping of structures. Dental films placed intraorally can be used with a standard radiographic machine to help with some of these problems; however, the practitioner wishing to incorporate dental radiology into his or her practice is advised to invest in a dedicated dental unit.

Skulls were used for these images. Dental images were obtained with a digital sensor; the traditional radiographs were taken using extraoral technique with a standard radiographic machine.





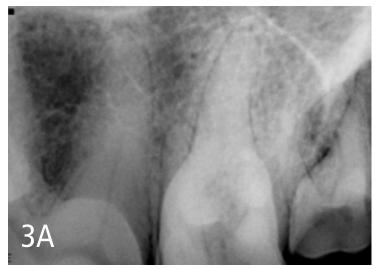
Dental images showing views of the maxillary left canine tooth taken from two angles. The detail is very clear, and the images are of diagnostic quality.



Traditional radiograph used to x-ray the maxillary left canine. It is difficult to clearly see the tooth root and surrounding periodontal ligament space.



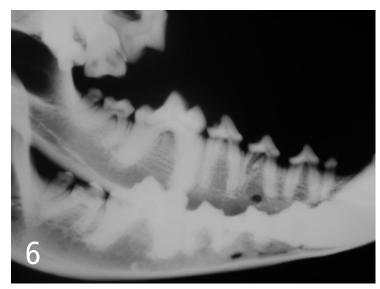
Traditional radiograph of the maxillary molars and fourth premolar. It is difficult to obtain a clear radiograph of these teeth. The overlapping structures make interpretation difficult or impossible.



Dental images of parts of the left maxillary forth premolar and first molar.



Intraoral dental image of the mandibular left first molar.



Traditional radiograph of the left mandible. Traditional radiography does allow evaluation of the premolars and molars with minimal detail.