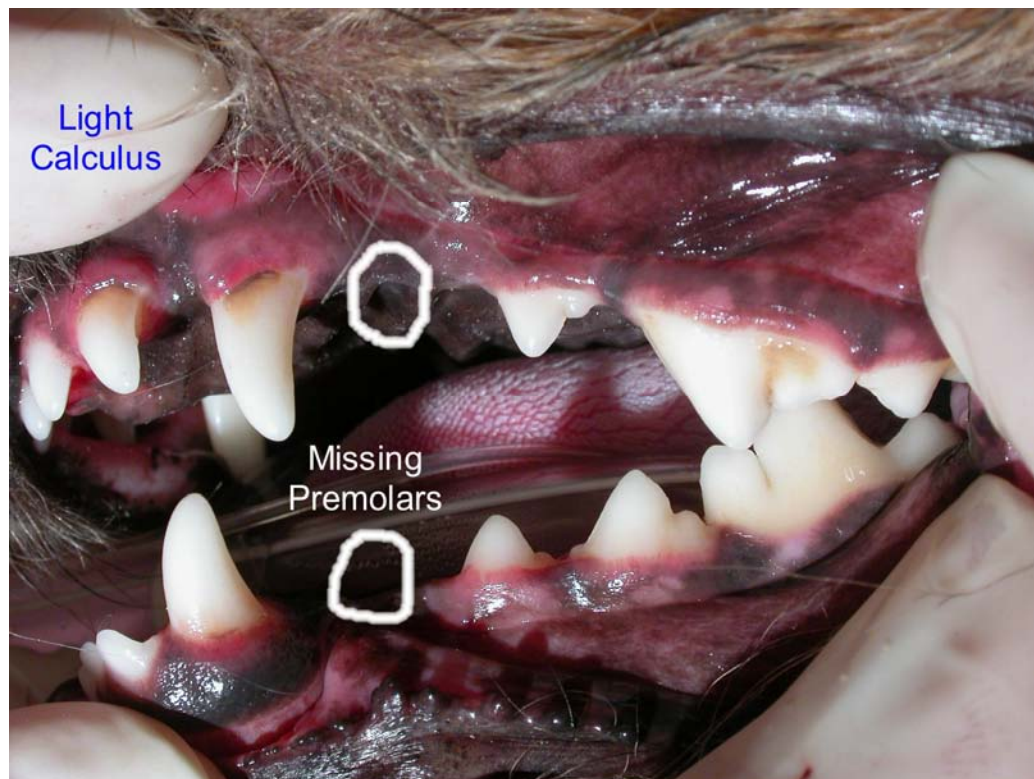


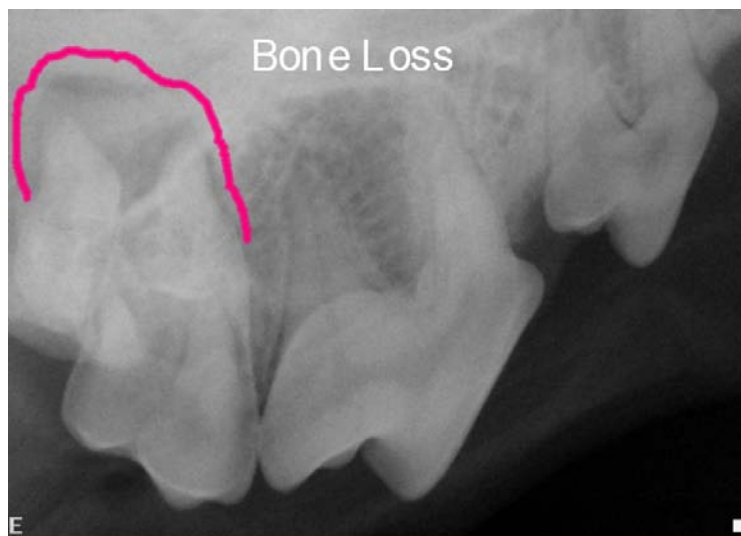
CASE OF THE MONTH (December 2007)

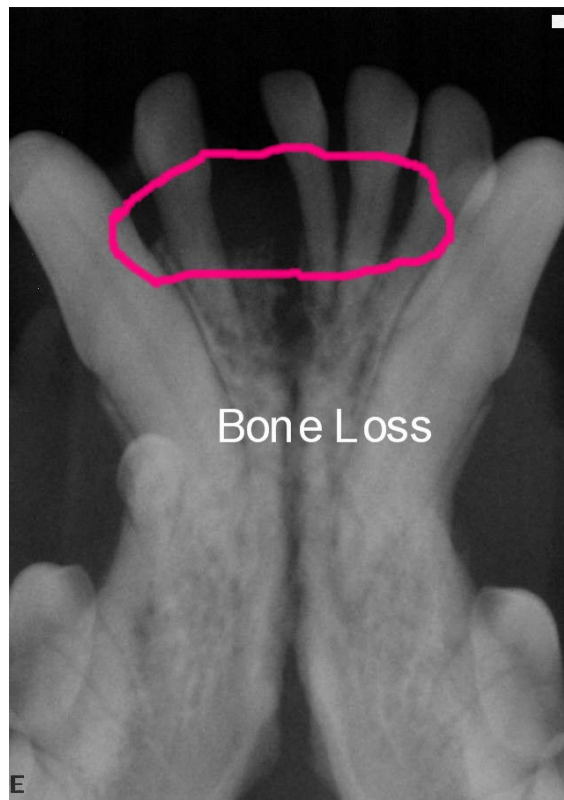
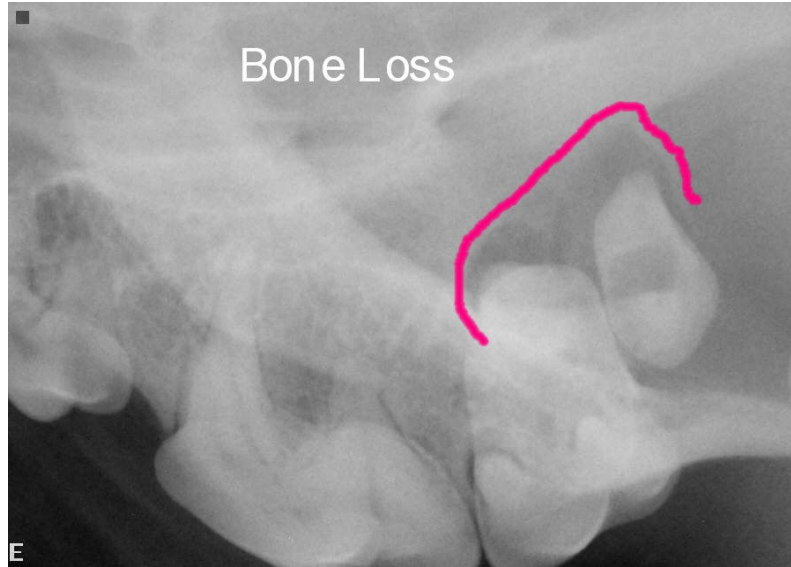
Signalment and History:

A three year old spayed female Norwich Terrier was presented by the owner for a dental prophylaxis with no specific concerns regarding her oral health. The oral evaluation in the exam room revealed no marked pathology. The exam showed light calculus and a gingivitis index of one. The most remarkable finding was the absence of nine teeth.



Procedures: The patient was placed under general anesthesia and a complete oral exam was performed. Upon examination with the periodontal probe, severe periodontal pocketing was found in the area of all four maxillary molars and all four remaining mandibular incisors. Intraoral radiography showed that all of the missing teeth were indeed truly missing. In addition, the radiographs revealed severe bone loss of the maxillary molars and mandibular incisors. All of these teeth were extracted and the surgical sites were closed with 4-0 Monocryl.





Discussion: One of the most difficult aspects of providing good dental care to our patients is attempting to assess the extent of oral pathology while the patient is awake in the exam room. This case is a perfect example. In this case it appeared that the patient had no serious oral disease at all. After placing the patient under general anesthesia, it soon became quite evident that she was suffering from Stage IV periodontitis. The initial assessment of the patient's oral condition without anesthesia had no bearing upon the reality of the situation at all. Unfortunately this is a very common occurrence in all veterinary practices, including my own. It is very important that the owner be made aware of this difficulty before the procedure is started. Although I always attempt to provide the owner with my best guess as to the extent of pathology in the exam room, I always emphasize emphatically that "The real exam begins under anesthesia." Even in a patient that is very cooperative while awake, we will often miss serious oral pathology until the patient has been anesthetized.

The number one reason that clients decline to have dental procedures performed upon their pet is the fear of the danger of general anesthesia. Naturally they would be very happy if oral health procedures could be effectively performed without that dreaded general anesthesia. This has led to a situation in California where groomers are offering "dental cleanings" without anesthesia. Even some veterinarians offer similar services. While this may appeal to the fearful client, there are many shortcomings associated with this type of procedure.

We have already seen that very serious oral disease is easily overlooked with such a procedure. In addition, the removal of calculus found on the crown of the tooth is merely cosmetic in nature. It has NO beneficial effect for the patient. The plaque that causes periodontal disease is found subgingivally, not on the crown of the tooth. The only way to remove subgingival plaque and calculus is by using sharp hand instruments or ultrasonic scalers under the gingival margin. This procedure is uncomfortable and frightening to a patient that is not under general anesthesia. As a result, an awake patient will not receive a thorough subgingival prophylaxis and will be sent home with the same disease-causing plaque that he or she came in with.

Not only does the patient receive an inadequate treatment, but the client leaves with a false sense of security. The client feels good because he or she thinks they have done a very good thing for their pet while avoiding the danger of anesthesia. Therefore they will take their pet home with the misconception that the oral cavity is clean and disease-free, and that nothing needs to be done until the annual cleaning next year. Meanwhile, the subgingival plaque is destroying the periodontal tissues, and by next year the situation will become much worse.

I tell my clients that this situation is much like having a fire in your home. You call the fire department and they quickly arrive on the scene. They immediately put out the smoke to make you feel better, but when they drive away, the fire is still burning.

Unless a patient is under general anesthesia and intubated, there is a very real danger of aspiration of water, saliva, calculus, or an extracted tooth. I am sure many of you will remember a case written up in JAVMA a few years ago that showed a thoracic radiograph with an upper 4th premolar sitting snugly in the trachea.

With the advances in anesthetic protocol and pain management in recent years most of the dangers formerly associated with general anesthesia have been removed. By utilizing a thorough physical examination and pre-anesthetic bloodwork, we can identify most potential anesthetic problems before they occur. By using balanced anesthetic protocols, supportive measures such as intravenous fluids, thermoregulation with warm water circulating blankets and Bair Huggers, extensive monitoring systems, and pain management including regional blocks, we have enhanced the safety of general anesthetic procedures. It is the duty of all of us to properly educate our clients on the safety and necessity of general anesthesia as an important tool to properly diagnose and treat oral disease.

The American Veterinary Dental College has issued a Position Statement on “Anesthesia-Free Dentistry.” The full text can be read at:
<http://www.avdc.org/position-statements.html#cadswa>

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