Senior Focus on the Oral Cavity

How Old Is “Too Old” for Dentals?

by Heidi Lobprise, DVM, DAVDC

There has always been a strong correlation between senior pets and dental disease. The incidence of periodontal disease increases with advancing age, progressing if left untreated. The incidence of periodontal disease also is increased in smaller dogs due to a relatively decreased amount of bone (compared to tooth size), crowded teeth, and a more delicate jaw structure. Since smaller dogs typically live longer lives, a dental practice will likely encounter a significant number of smaller, older dogs (and cats) with dental disease.

Pets are living longer with a lifetime of care, but that older pet often has multiples issues or comorbidities. With these conditions, additional care needs to be taken for the general anesthetic procedure that is necessary for complete dental care.

While the actual number of years may not matter, and “age is not a disease,” aging is a process of gradual deterioration and decrease in physiological reserves, so our senior patients do deserve special attention. Identifying their life stage is the first step, which is fairly simple for cats, given the *2021 AAHA/AAFP Feline Life Stage Guidelines* that designate 11 years of age as senior for cats. Determining a dog’s relative age or life stage is more challenging, as giant breeds age more quickly, reaching senior status by 6 years of age, while a small dog is senior at around 9 years of age.

So, when is a pet “too old for dentistry”? The answer to that is obviously based on the individual, but since the continuing presence of the oral chronic inflammation and infection can further impact systemic disease and even aging itself, the benefits of the dental care typically outweigh the risks for the great majority of pets.

Sometimes the biggest challenge is convincing the owner about those benefits and overcoming their concerns. If there is obvious disease (draining abscess, oral tumor, pathological fracture), then stabilization of the patient prior to the procedure will minimize those risks. If the owner isn't convinced, a round of antibiotics and pain medications may show them that their pet does have infection and pain that responded to the medication.
You then have to convince them that the medications were a mere bandage, a temporary reprieve from the effects of the disease, and complete resolution will take a dental procedure. A good preanesthetic workup from this point can help evaluate any issues that may require some management or resolution prior to anesthesia.

Patient Assessment and Preparation

For the senior patient that needs dental or oral care, a thorough physical examination and complete diagnostics (blood chemistries, complete blood count, urinalysis, blood pressure) will provide an initial assessment of overall health. From body condition score (BCS) to evaluating lean body mass, thoracic auscultation and abdominal palpation, any variation may indicate the need for additional investigation.

A heart murmur or arrhythmia should be followed with thoracic radiographs and heart stress biomarker (ProBNP) or other chemistry assessment. If these are stable, the murmur doesn't necessarily indicate current decompensation of the cardiac system. If there are elevations in the vertebral heart score or ProBNP, an echocardiogram would be the next step to delineate how much disease is present and if management is necessary to stabilize the patient before anesthesia.

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Once stable (or if already stable), appropriate analgesic, anesthetic, and monitoring protocols with preoxygenation can further minimize any risks present. Renal patients

may need preoperative hydration correction or medication to stabilize their condition, with appropriate medication choices and fluid therapy even in the postoperative periods.

Senior patients with increased anxiety due to cognitive issues can be medicated previsit and Fear Free methods can be used to help decrease the stress to the lowest level possible. Pain management is also critical for all dental patients, but particularly the senior ones, to return them to normal function and normal eating as quickly as possible. So, except for extreme cases, a patient is seldom “too old” for appropriate dental care. Now, if the client is willing to visit a board-certified dental specialist, some of the risk factors can be further minimized due to their likely comfort level with such patients and appropriate equipment and skills to help minimize the time under anesthesia.

The decision may also depend on the extent of the oral problems, but that can get complicated as well. There may be mild plaque and calculus present on the teeth, but how many patients have had hidden problems that were only discovered when dental radiographs were taken? Should we wait until there is swelling, abscessation, or a broken jaw before intervening? If a procedure turns out to be “just” a teeth cleaning—what a great surprise! Given that even minor amounts of plaque and calculus can support the presence of a chronic inflammation, even resolving that can be beneficial.

Complications and Staging

Too many times, however, we get into those old, small mouths and find out there is much more than we bargained for! What do we do then? While we can keep all monitoring parameters stable in many of these patients, even with procedures lasting two hours or longer, minor changes in blood pressure and especially body temperature can be real issues in these senior pets.

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Plus, most practices don’t have the flexibility to take three hours for a procedure that had been scheduled for one hour, with other patients waiting. For those cases with surprise problems that require additional oral surgery, it can be a benefit to the patient (and to you) to “stage” these procedures and complete the more challenging oral surgery at a later time. In fact, you can even inform pet owners on the surgery admittance form that the decision to stage the procedure may be needed for their pet.

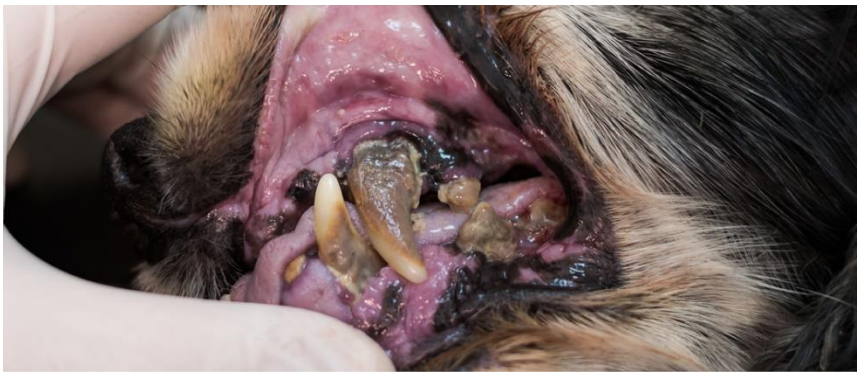
Most of these problems will only become apparent once radiographs are taken. While some of the initial cleaning may have taken place, taking radiographs earlier in the procedure will give the team a better idea of how many problems they will encounter. In fact, if I have selected certain teeth for extraction, we don’t spend a lot of time on them with meticulous cleaning. This also fits in with our scheduling for calling the owner during the procedure to update them on the work that is needed and the revised treatment plan.

At that point in time, you can reinforce the message of staging a procedure: providing a good general cleaning, radiographs and performing “simple” extractions, leaving the complicated extractions or potential periodontal surgery (oral surgery) for a later date. You can even give them the option to refer these cases for oral surgery (just be aware of scheduling issues with your local specialist). In fact, once that patient returns in two to

four weeks, blood work usually doesn't have to be repeated, they are often more comfortable, and even the tissues may be less inflamed and easier to manage.

Common Conditions in Senior Pets

Periodontal disease in older dogs can often be quite advanced, particularly if regular professional and home care has not kept the oral cavity healthy over the years. Areas of special interest include the canine teeth and mandibular first molars, especially in smaller dogs. Identification of advanced bone loss often warrants extraction—careful, gentle extraction.



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Untreated bone loss in these areas can lead to significant problems including potential pathogenic fracture of the mandible with minimal outside force, traumatic or iatrogenic. Often there is insufficient healthy bone present to allow surgical repair, and sometimes removal of the segment rostral to the fracture (rostral mandibulectomy) is a palliative option.

Bone loss at the mandibular canines and incisors can contribute to symphysis disintegration and often extensive mobility. Most pets adjust to that mobility, so stabilization with wiring is usually not needed. Eventual extraction of those canines may be challenging, but if chronic infection is present, they need removal.

Bone loss at the palatal aspect of the maxillary canines can lead to oronasal fistulation and not just in dachshunds. When these canines are extracted, special attention needs to be paid to the full thickness mucogingival flap. It should be slightly wider than the defect size, and complete release of the periosteum on the underside of the flap is essential to minimize tension on the flap closure. Even with healthy tissue and excellent flap design and closure, a persistent opening is always possible due to tension on the flap with every breath. Sometimes a secondary repair is needed.

A unique lesion seen in senior cats is chronic osteitis-alveolitis, primarily at the maxillary canines. Instead of a typical periodontal reaction of gingiva and bone loss, the buccal

bone becomes expansile, buttressing and enlarging. The overlying gingiva actually seems to be stretched thinly over this expanding bone, and eventually periodontal pockets can occur and the tooth/teeth become mobile. The teeth may also over erupt, seeming to become longer, with root exposure due to this hypereruption, not due to gingival recession that causes root exposure in typical periodontal disease.

Summary

It is important to recognize that oral and dental disease often increases in incidence in older pets. Since resolving these issues can improve the patients' overall quality of life, managing the anesthetic risks of these patients, and concerns of their owners is critical. Seldom will a pet be too old to benefit from optimal care.

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