

SMALL MOUTHS, BIG HOLES:
Oral Masses: What Is That? What Should I Do?

You probably have encountered that unexpected oral mass during a routine dental cleaning, oral examination, or brought to your attention by an astute owner (Fig. 1). Now you are faced with important decisions on how to diagnose and eventually treat the mass. The best-case scenario is that you already have the patient under anesthesia and can biopsy the mass for diagnosis. *What happens if you do not have the patient under anesthesia? Should you anesthetize to get a small piece, or would the patient be better served by referral to a specialist for definitive treatment?* The worst possible outcome would be that the patient would be anesthetized and the biopsy taken was non-diagnostic. *Nothing is more frustrating than telling*



Fig. 1 This acanthomatous ameloblastoma may be found unexpectedly during a routine dental cleaning or oral examination..

the owner that

a biopsy did not give the answer. In this case, the patient will have to undergo anesthesia at least one more time for another biopsy for diagnosis and likely another time for treatment. How can this be avoided? Many times we can perform excisional biopsy. This means that we can achieve a diagnosis and a potential cure at the same time. *How do you determine if a mass can be treated in this way?* We use dental radiographs, location of the mass, and size of the



Fig. 2 This gingival mass (A) was suspected to be an epulid. An excisional biopsy could give the diagnosis and a cure with one procedure. The mass was excised and histopathology revealed a fibromatous epulis with complete margins (B).

mass to determine if excisional biopsy is warranted. If the mass appears benign with no radiographic changes and is in a location such as the rostral mandible, it would be best treated with an en-bloc resection of the mass and surrounding tissues (Fig. 1). *The surgical plan is the same regardless of tumor type: 1- cm of normal margina around the entire lesion.* This may be the only procedure that is needed in the case of a benign tumor (Fig. 2). If the mass is malignant, the patient would be referred to an oncologist for adjunctive treatment after consultation with the referring veterinarian (Fig. 3 and 4). *Whether benign or malignant, the good news is the tumor is “gone” with the goal of tumor-free margins.*

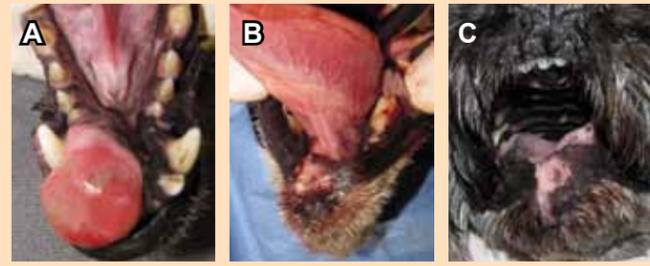


Fig. 3 This lesion (A) had an excisional biopsy (B) that showed plasmacytoma ... a cure with normal healing (C) at 2-weeks.



Fig. 4 This lesion (A) had an excisional biopsy (B) that showed melanoma completely excised (C). Recommend melanoma vaccine.

CALL TODAY FOR REFERRAL INFORMATION
301-990-9460



CENTER FOR VETERINARY DENTISTRY AND ORAL SURGERY

9041 GAITHER ROAD, GAITHERSBURG, MD 20877

PHONE: (301) 990-9460 FAX: (301) 990-9462

www.centerforveterinarydentistry.com

SUMMER NEWSLETTER

The Center Welcomes... Dr. Emily Edstrom!

SPECIALIZATION BEYOND EXPECTATION™

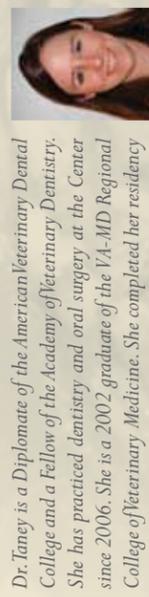
CENTER FOR VETERINARY DENTISTRY AND ORAL SURGERY
DENTISTRY ♦ ORAL & MAXILLOFACIAL SURGERY ♦ HEAD & NECK SURGERY

The Center for Veterinary Dentistry and Oral Surgery offers cutting edge knowledge and state-of-the-art equipment to help you manage your patients with dental and maxillofacial disease.

- Root canal therapy
- Restorations for caries and enamel defects
- Metal crowns to strengthen fractured teeth
- Surgery for neoplasms of the maxilla, mandible & facial area
- Repair of maxillofacial fractures
- Correction of congenital palate defects
- Surgical extraction of diseased multi-rooted teeth and impacted teeth
- Therapy for oral inflammation
- Surgical management of diseases of the head and neck



Dr. Mark M. Smith and Kendall G. Taney are partners in the Center for Veterinary Dentistry and Oral Surgery established in 2006. Dr. Smith is a Diplomate of the American College of Veterinary Surgeons and the American Veterinary Dental College. He was Professor of Surgery and Dentistry at the VA-MD Regional College of Veterinary Medicine at Virginia Tech for 16-years before entering private practice in 2004. Dr. Smith is Editor of the Journal of Veterinary Dentistry and co-author of Atlas of Approaches for General Surgery of the Dog and Cat.



Dr. Taney is a Diplomate of the American Veterinary Dental College and a Fellow of the Academy of Veterinary Dentistry. She has practiced dentistry and oral surgery at the Center since 2006. She is a 2002 graduate of the VA-MD Regional College of Veterinary Medicine. She completed her residency at the Center and has also performed internships in both general medicine and surgery, and specialized surgery.

Dr. Emily Edstrom is a 2010 graduate of the Colorado State University School of Veterinary Medicine. She completed a rotating internship in small animal medicine and surgery at VCA Veterinary Referral Associates in Gaithersburg, MD. She is a member of the American Veterinary Dental Society.



**BEYOND THE MOUTH:
Remove The Tumor...
Maintain Eye Function.**

Cutaneous tumors are best treated by complete excision and histopathologic examination *early in the disease process when they are small*. Whether benign or malignant, hopefully this treatment philosophy will result in positive clinical results. As we all are aware, sometimes owners will “watch” tumors grow perhaps thinking that they will

just go away! As clinicians, it is important to emphasize that a definitive action step is best performed early in order to minimize any negative impact on the function of important structures such as the eye. *Removing the tumor may be the easy component of the surgical procedure; reconstructive surgery to maintain eyelid function and normal eyelid closure is the challenge!* Additional operative goals include prevention of ocular irritation and recurrence. Primary closure of a periocular wound, even if relatively small, can lead to the complication of lagophthalmus and corneal irritation from decreased moisture and lubrication.

A high percentage (~80%) of eyelid tumors are sebaceous adenomas, papillomas, and melanomas. *We often remove small eyelid tumors during the dentistry/oral surgery procedure at the request of the owner and referring veterinarian in order to be efficient and avoid a second anesthetic episode.* Sebaceous gland tumors (sebaceous adenoma, sebaceous epithelioma, and sebaceous adenocarcinoma) originate from the meibomian glands of the eyelid region (Fig. 1). Large periocular tumors require diligent preoperative planning in order to avoid the aforementioned complications (Fig. 2 and 3). Our goals are to excise the tumor completely with maximum tumor-free margins while maintaining excellent eyelid function and cosmesis (Fig. 4). *Knowledge of plastic and reconstructive surgical techniques allows the accomplishment of these goals to the satisfaction of the client and referring veterinarian.*



Fig. 1 Biopsy of this tumor below the right eye was sebaceous epithelioma. It had been present for 12-months.

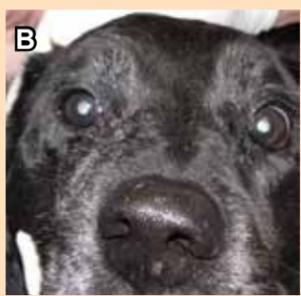


Fig. 2 Complete excision of the tumor (A) required reconstructive surgery using a rotation flap based on the facial artery and vein (B).



Fig. 3 The transposition of the flap has been completed followed by incision for cheiloplasty (A). The defect has been closed by a combination of rotation flap and cheiloplasty (B).

Fig. 4 Four-week examination shows complete primary healing (A) with only minor deviation of the nose (B). The final diagnosis was completely excised sebaceous adenocarcinoma.



**FELINE DENTISTRY:
Pain Too Soon!
Juvenile Gingivitis In Cats.**

Bringing home a new feline member of the family is always exciting. All owners hope that their kittens will be happy and healthy. It can be very disappointing when a problem is noted at a young age. One such problem we see is early onset gingivitis (Fig 1). *It can occur in very young kittens and present as halitosis, ptyalism, obvious gingival inflammation, and oral pain.*

The severity of the symptoms can vary widely and many kittens are asymptomatic. This problem is not directly associated with any viral diseases, although it can be seen in combination. Unfortunately the writing is on the wall that the problem will need to be addressed. Most importantly the owner should be instructed on routine home dental care. This can keep the problem under control in many cats. Brushing the teeth at home and regular professional



Fig. 2 Chronic inflammation causes loss of periodontal support tissues such as alveolar bone. Bone loss is evident on this radiograph..

dental cleanings every 6-12 months can help slow progression of the disease. *When we are presented with these cases we start with baseline dental radiographs to give us a reference point for alveolar bone height and overall periodontal health* (Fig. 2). We then perform a thorough cleaning, excise exuberant inflamed gingiva, and perform any needed extractions. The single-rooted teeth are often lost first as the disease progresses. These cats are likely to lose teeth at an early age, but can still lead healthy and happy lives. In severe cases, we may recommend full-mouth

extractions relatively early. This removes the source of the problem and avoids years of unsuccessful medical management or extractions having to be done at every cleaning. It can also be more cost effective for the owner. Anecdotally, we have noted that refractory stomatitis (stomatitis that does not improve after full-mouth extractions) occurs more frequently in patients that have had inflammation present for many years (Fig. 3). So in our opinion, treating the problem early has many benefits. *The great news is that these cats have an excellent quality of life without these teeth, and their mouth is no longer painful!*



Fig. 1 Gingival inflammation surrounding the teeth in a juvenile cat.

extractions. This problem is not directly associated with any viral diseases, although it can be seen in combination. Unfortunately the writing is on the wall that the problem will need to be addressed. Most importantly the owner should be instructed on routine home dental care. This can keep the problem under control in many cats. Brushing the teeth at home and regular professional dental cleanings every 6-12 months can help slow progression of the disease. *When we are presented with these cases we start with baseline dental radiographs to give us a reference point for alveolar bone height and overall periodontal health* (Fig. 2). We then perform a thorough cleaning, excise exuberant inflamed gingiva, and perform any needed extractions. The single-rooted teeth are often lost first as the disease progresses. These cats are likely to lose teeth at an early age, but can still lead healthy and happy lives. In severe cases, we may recommend full-mouth



Fig. 3 Severe chronic caudal stomatitis in an older cat. Significant inflammation is present throughout the mouth despite near full-mouth extractions in this refractory case.

**URGENT CARE:
Tooth Avulsion.**

There are few true emergencies in veterinary dentistry, and tooth avulsion is certainly one of them (Fig. 1). In human dentistry, there is a term called the “golden hour”. Essentially this means that the best prognosis for successful reimplantation of an avulsed tooth should occur within 1-hour. This is not always possible in veterinary medicine, *but the patient should be referred as soon as possible*. If you have a client that calls with this emergency, they should be told to not attempt to clean the tooth at all and to place it in milk, not water for transport. *Cleaning the tooth or placing it in water can damage the periodontal cells that are essential for successful reimplantation and healing of the tooth.* The avulsed tooth will have lost its blood supply, so it will require root canal therapy at a later date, but the tooth can still be a functional part of the dentition. After reimplantation, a wire and acrylic splint is typically placed to hold the tooth in place while healing occurs (Fig. 1). The splint will be removed in about 4-weeks, and root canal therapy should be performed at this time. *Without root canal therapy the tooth will eventually become infected because it is no longer vital.* Potential complications with any tooth trauma are that healing may not occur, or in some cases the root of the tooth may undergo resorption spontaneously. However, these complications are not overly common and should not prevent treatment. *Many clients think there is no hope when an accident like this occurs; the good news is that we can give the tooth a fighting chance!*

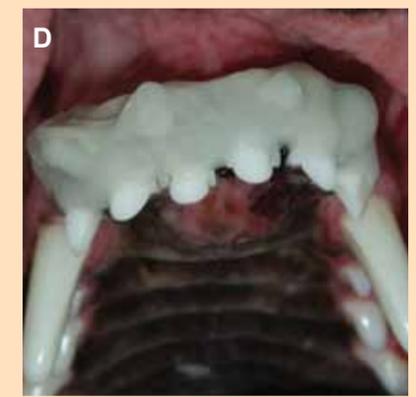
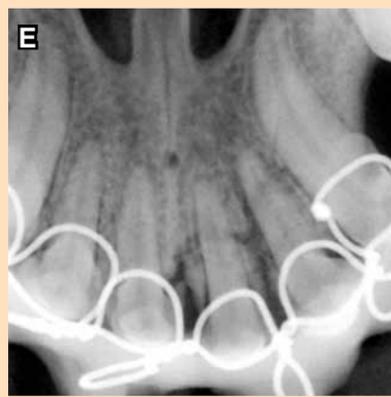
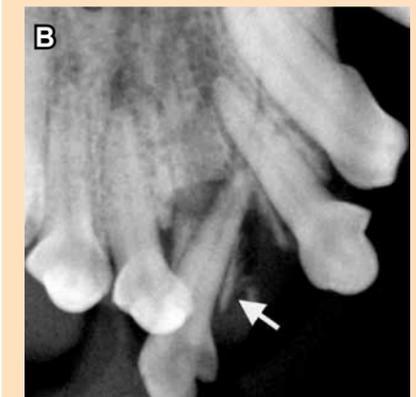


Fig. 1 Complete avulsion of a maxillary incisor tooth (A) with confirmatory radiograph (B). Note the avulsion of attached incisive bone (arrow). After reimplantation, interdental wire is used to stabilize the tooth during healing, while the added interdental acrylic strengthens the appliance (C and D). The final radiograph shows reduction of the avulsed tooth and stabilization with a wire and acrylic splint (E).