GERIATRIC DENTISTRY:

True or False - Teeth with Severe Periodontal Disease are Easy to Extract.

**False**. Geriatric dentistry is complicated. Imagine a 10-year-old miniature Dachshund dog with severe periodontal disease requiring extraction of all canine and carnassial teeth (Fig. 1). The dog has compensated heart disease secondary to chronic mitral insufficiency and is in compensated chronic renal failure with a BUN of 40 mg/dl and creatinine of 2.5 mg/dl. The periodontal disease is so bad that it may be contributing to the severity of the renal disease, and could complicate the heart disorder. Talk about stress and... the teeth have to go! Older patients tend to have greater anesthetic risk, especially in conjunction with major organ dysfunction.

Critical care anesthesia and speed in performing the procedure are vital for a positive result. A multimodal-anesthetic and pain management plan is required. Narcotic premedication, regional and local nerve blocks, anti-inflammatory (ibuprofen and transdermal fentanyl) patches provide 3 different drug classes for perioperative pain management. Anesthetic induction with short-acting drugs such as propofol aid a smooth recovery. Positive-pressure ventilation during the procedure to ensure appropriate ventilation and oxygen perfusion and state-of-the-art monitoring including pulse oximetry, non-invasive blood pressure, end-tidal CO2, ECG, heart rate, and core body temperature minimizes anesthetic risk. Double heating pads during the procedure, and kennels with heated floors aid anesthetic recovery. Medications that could negatively affect cardiac or renal function, and blood pressure are absolutely avoided.

The presence of severe periodontal disease does not mean the extractions will be "easier". Surgical tooth extraction requires mucogingival flap techniques to expose diseased periodontal tissues and alveolar bone. Judicious removal of alveolar bone and crown sectioning facilitate extraction. Ventral mandibular bone may be deficient from the destructive periodontal disease process. Extraction forces used in younger patients without complication may cause mandibular fracture in geriatric patients. Following extraction, the mandible is relatively weaker. Synthetic bone stimulating materials (B) aid in restoration of bony integrity following extraction. Pre- and postoperative images show application of the material in mandibular alveolar sockets (C) and at mandibular incisor and canine teeth extraction sites (arrow) (E).

**ORAL TUMORS:**

True or False - Surgery is Almost Always Part of a Multimodality Treatment Plan for Oral Tumors.

**True**. The reffering clinician, oral and maxillofacial surgeon, and oncologist work as a team to stage the neoplasm: CBC, serum chemistries, thoracic radiographs +/- MRI or CT scan of the lesion, incidental or excisional biopsy, and regional lymph node (mandibular, parotid, medial retropharyngeal) excisional biopsy. Why is the staging process important? This information is valuable to the owner/surgeon/oncologist to decide: Has the neoplasm already metastasized? Is the neoplasm potentially resectable? What is the prognosis with complete or incomplete excision? What type of follow-up oncologic therapy will be recommended? The surgeon’s operative goal is always tumor-free margins following resection. This goal often necessitates aggressive en bloc surgery with 1-2 cm gross tumor-free margins. CO2 laser surgery for soft tissue resection decreases postoperative pain and decreases intraoperative hemorrhage. Ostectomy of associated bone is required. In fact, since skin is usually viable within the margin area, cutaneous resection is often indicated (Fig. 3). Therefore, surgery may involve the hemorrhage-prone nasal cavity, or lip reconstruction (Figs. 4 and 5). Familiarity with various plastic and reconstructive surgery techniques is important since post-resection wounds may be intimidating and appear daunting to do. Intracranial lesions may require large buccal mucosal flaps or a hard palate mucoperiosteal flap based on the greater palatine artery to provide wound closure and avoid oronasal fistula as a complication (Fig. 5).

**SALIVARY GLAND DISEASE:**

True or False - An effective treatment protocol for salivary mucocele includes intermittent aspiration and antibiotics.

**False**. A mucocele is an accumulation of saliva in the subcutaneous tissue and can cause symptoms such as swelling, pain, and difficulty in eating. Treatment options for salivary mucocele depend on the location of the mucocele, the size of the lesion, and the patient’s overall health. In some cases, surgical intervention may be necessary to remove the mucocele and prevent complications such as infection or obstruction of the salivary ducts. Invasive procedures may require general anesthesia and can be associated with pain, swelling, and discomfort. Therefore, the optimal treatment protocol for salivary mucocele should be individualized based on the patient’s specific needs and circumstances. Intermittent aspiration and antibiotics may be used in cases where the mucocele is small and located in a less critical area, but for larger or more painful lesions, surgical intervention may be necessary to achieve a complete cure. Additionally, surgical intervention is often recommended to prevent recurrence of the mucocele as the lesion may be associated with underlying neoplasia or infection. Therefore, the effective treatment protocol for salivary mucocele should be individualized based on the patient’s specific needs and circumstances.