Oral and Maxillofacial Surgery

Oral Tumors
Oral tumors occur frequently in dogs and cats. Tumors in the oral cavity may be benign (non-cancerous) or malignant. It is very important that all masses in the oral cavity be biopsied so that the cell type can be determined. Appropriate treatment is based on tumor type and extent of disease and may include surgical resection of the mass or surgical resection of a portion of the upper or lower jaw, radiation therapy and/or chemotherapy.

Missing Teeth

Anytime a tooth is missing and there is no history of previous extraction, an intraoral radiograph should be obtained. Unerupted teeth that are embedded in bone can lead to the formation of a dentigerous cyst which is an expansile fluid filled cyst. Surgical removal of an unerupted (embedded) tooth is recommended or surgical removal of the embedded tooth and the associated cyst if one is present.

Missing left lower first premolar with resulting soft tissue swelling below the left lower second premolar tooth (white arrow). Radiograph shows the dentigerous cyst (dark area) containing the unerupted left mandibular first premolar (lying horizontally). Note the resorption of the roots of the mandibular left second premolar and the loss of bone along the distal side of the left mandibular canine tooth.
**Palatal Defects**

Palatal defects may be congenital (puppies and kittens are born this way) or acquired (due to trauma most often). Palatal defects result in communication between the oral and nasal cavities and can lead to difficulty eating and breathing. Treatment for palatal defects is surgical closure of the defect.

**Difficult Extractions**

The root of the tooth of a dog or cat is longer than the crown portion of the tooth. As a result, many tooth extractions are difficult or surgical extractions. These cases may be referred to a veterinary dentist.

Left lower canine tooth complicated crown root fracture with multiple fragments below the gumline

**Jaw Fractures**

Jaw fractures occur secondary to trauma. Repair of a jaw fracture often includes the use of an intraoral acrylic splint in conjunction with interdental wiring to stabilize the fracture.

Intraoral acrylic splint application for bilateral anterior mandible fracture in a dog
Oronasal fistulas

Oronasal fistulas most commonly result from periodontal disease destroying the bone on the palatal (inside) surface of the maxillary (upper) canine tooth in the dog. This results in a ‘hole’ between the oral and nasal cavities. It is necessary to close the resulting defect so that food does not go into the nose as the patient is chewing.

![Oronasal fistula](image1)

Oronasal fistula is present at the previous site of the left upper canine tooth. The defect extends into the nose.

![After surgical repair](image2)

After surgical repair of the defect utilizing tissues from the inside of the left upper lip.

Dislocated Teeth

Teeth can be luxated or avulsed due to trauma. Treatment options for a luxated tooth include saving the tooth by replacement of the tooth into the alveolus (socket), splinting the tooth in place and root canal treatment of the affected tooth or extraction of the affected tooth.

![Luxated left upper canine tooth](image3)

Luxated left upper canine tooth
**Salivary Mucocele**

A salivary gland cyst is also known as a sialocele or salivary mucocele. The most commonly affected glands are the mandibular salivary glands under the jaw. The sublingual (under the tongue) glands can also be affected causing a ranula or swelling under the tongue. The cyst is caused by disruption in the duct system which results in leakage of saliva into the surrounding tissues of the neck or under the tongue. Treatment for a cervical mucocele involves removal of the affected mandibular and sublingual salivary glands. Treatment of an intraoral mucocele (ranula) is marsupialization of the ranula.

Ranula visible under the right side of the tongue in a dog

Saliva like fluid obtained from the swelling.