WHAT IS PERIODONTAL DISEASE?
PERIODONTAL DISEASE IS INFLAMMATION AND DESTRUCTION OF TOOTH SUPPORTIVE STRUCTURES. IT IS A PROGRESSIVE DISEASE OF CONNECTIVE TISSUE AND BONE.

PERIODONTAL DISEASE HAPPENS IN FOUR STAGES:

STAGE 1 - REVERSIBLE GINGIVITIS
STAGE 2 - EARLY PERIODONTITIS
STAGE 3 - MODERATE PERIODONTITIS
STAGE 4 - SEVERE PERIODONTITIS
STAGE 1 - REVERSIBLE GINGIVITIS

- INFLAMMATION OF THE GINGIVA
- NO ATTACHMENT LOSS
- SWELLING, EDEMA
- REVERSIBLE AFTER A DENTAL CLEANING
STAGE 2 – EARLY PERIODONTITIS

• UP TO 25% TISSUE ATTACHMENT LOSS
• ATTACHMENT LOSS IS LOSS OF TISSUE HOLDING A TOOTH IN PLACE. THIS INCLUDES SOFT TISSUE AND BONE
• ATTACHMENT LOSS IS SEEN AS PERIODONTAL POCKET FORMATION OR GINGIVAL RECESSION
STAGE 3 - MODERATE PERIODONITIS

• 25 TO 50% TISSUE ATTACHMENT LOSS (SOFT TISSUE AND BONE LOSS)
STAGE 4 - SEVERE PERIODONTITIS

• GREATER THAN 50% TISSUE ATTACHMENT LOSS (SOFT TISSUE AND BONE)

• POTENTIAL FOR SIGNIFICANT MOBILITY
MORE PERIODONTAL DISEASE STAGE 4
PERIODONTICS

- A branch of dentistry that deals with diseases of the supporting structures of the teeth including the gingiva, cementum, periodontal ligaments, and alveolar bone.

PERIODONTAL TREATMENT

The Goals of a Periodontal Treatment (or Dental Cleaning) are:
1. Mechanical debridement of plaque and calculus
2. Healing or regeneration of the gingival pockets
3. Elimination of active inflammation
4. Cessation of tissue and bone attachment loss
5. Establishing conditions conducive to periodontal health
EXODONTICS

- A BRANCH OF DENTISTRY THAT DEALS WITH EXTRACTION OF TEETH

INDICATIONS FOR EXTRACTING A TOOTH OR TEETH WOULD BE:
- SEVERE PERIODONTITIS
- DEEP CROWN-ROOT FRACTURE
- TOOTH IN FRACTURE LINE
- PERSISTENT OR RETAINED DECIDUOUS TEETH
- SUPERNUMERARY TEETH
- FELINE RESORPTIVE LESION
Extraction can also be an alternative treatment option for the following conditions:

- Complicated Crown Fracture
- Pulp Necrosis/Pulpitis
- Caries
- Traumatizing Malocclusions
- Chronic Stomatitis
- Pre Radiation Treatment
FRACTURED TEETH

There are different types of tooth fractures. The most common types are:

- **Complicated Crown Fracture:**
  - This type of tooth fracture involves pulp exposure which makes it painful. The fracture does not extend below the gum line. These will become infected.

- **Uncomplicated Crown Fracture:**
  - This type of tooth fracture does not directly expose the pulp of the tooth and does not extend below the gum line. It does expose the tooth dentin which is sensitive and sometimes leads to infection.

- **Complicated Crown Root Fracture:**
  - This type of tooth fracture has pulp exposure which is painful and the fracture extends below the gum line. Commonly seen as a slab fracture of a tooth. These also will become infected.

- **Uncomplicated Crown Root Fracture:**
  - This type of tooth fracture does not involve the pulp of the tooth but does extend below the gum line. It also involves the dentin of the tooth potentially causing sensitivity and infection.

- **Enamel Fracture:**
  - This type of fracture only involves the enamel of the tooth. Risk of infection, pain, and sensitivity are low.
COMPLICATED CROWN FRACTURE:
This type of tooth fracture involves pulp exposure which makes it painful. The fracture does not extend below the gum line. These will become infected. The treatment options for this are root canal therapy or extraction.
UNCOMPLICATED CROWN FRACTURE:
This type of tooth fracture does not directly expose the pulp of the tooth and does not extend below the gum line. It does expose the tooth dentin which is sensitive and sometimes leads to infection. Treatment can be to seal the exposed dentin, if the fracture was recent.
COMPLICATED CROWN ROOT FRACTURE:

This type of tooth fracture has pulp exposure which is painful and the fracture extends below the gum line. Commonly seen as a slab fracture of a tooth. These also will become infected. The treatment option for this is typically, advanced periodontal surgery combined with root canal therapy can be used to try to keep the tooth.
UNCOMPLICATED CROWN ROOT FRACTURE:
This type of tooth fracture does not involve the pulp of the tooth but does extend below the gum line. It also involves the dentin of the tooth potentially causing sensitivity and infection.
ENAMEL FRACTURE:
This type of fracture only involves the enamel of the tooth. Risk of infection, pain, and sensitivity are low.
Endodontics is a specialty in dentistry and oral surgery that is concerned with the prevention, diagnosis, and treatment of diseases of the pulp-dentin complex and their impact on associated tissues. (As defined by the AVDC)

- **Root Canal Therapy**: This procedure involves removal of the non-vital pulp tissue, cleaning and disinfecting the canal before being filled with an inert material to prevent future bacterial infection.
ENDO DONTICS CONTINUED:

- **VITAL PULP THERAPY**: Procedure performed on a vital tooth with pulp exposure, involving partial pulpectomy, direct pulp capping and access/fracture site restoration (AVDC). This procedure usually needs to be done within 48 hours of the tooth fracture occurring. It is also an alternative treatment for a traumatizing malocclusion combined with crown height reduction.
PROSTHODONTICS (OR DENTAL PROSTHETICS OR PROSTHETIC DENTISTRY):
IS A SPECIALTY IN DENTISTRY AND ORAL SURGERY THAT IS CONCERNED WITH THE PROVISION OF SUITABLE SUBSTITUTES FOR THE CLINICAL CROWN OF TEETH OR FOR ONE OR MORE MISSING OR LOST TEETH AND THEIR ASSOCIATED PARTS. MAXILLOFACIAL PROSTHETICS IS CONSIDERED A SUBSPECIALTY OF PROSTHODONTICS, INVOLVING PALATAL OBTURATORS AND MAXILLOFACIAL PROSTHESES TO REPLACE RESECTED OR LOST TISSUES. (AS DEFINED BY THE AVDC)
CROWNS: A GREAT WAY TO PROTECT THE INVESTMENT OF A ROOT CANAL IS TO HAVE A METAL CROWN MADE AND PLACED ON YOUR PET'S TOOTH. CROWNS ARE A PART OF DENTISTRY CALLED PROSTHODONTICS.
MALOCCCLUSION (MAL) is any deviation from normal occlusion … malocclusion may be due to abnormal positioning of a tooth or teeth (dental malocclusion) or due to asymmetry or other deviation of bones that support the dentition (skeletal malocclusion). (As defined by the AVDC.)

**CLASS 1 MALOCCLUSION**

**CLASS 2 MALOCCLUSION**
MALOCCLUSIONS CONTINUED

CLASS 3 MALOCCLUSION

CLASS 4 MALOCCLUSION
ORTHODONTICS is a specialty in dentistry and oral surgery that is concerned with the prevention, interception and correction of malocclusion. (As defined by the AVDC)
PERSISTENT OR RETAINED DECIDUOUS TEETH ARE PRIMARY OR "BABY" TEETH THAT HAVE NOT EXFOLIATED WHEN THE ADULT PERMANENT DENTITION HAS ERUPTED.
SUPERNUMERARY TEETH IS THE PRESENCE OF 1 OR MORE EXTRA TEETH.
GINGIVAL HYPERPLASIA IS THE OVERGROWTH OF GINGIVA DUE TO GENETICS, INFLAMMATION, OR MEDICATIONS.
PULP NECROSIS OR PULPITIS is when the soft tissue inside the tooth becomes damaged to the point where it causes a tooth to become non-vital or a “dead” tooth.
A FOREIGN BODY is when an object from outside sources gets lodged somewhere in the mouth. This can cause significant pain, inflammation, and possible necrosis of tissues if not removed. The below picture is a stick foreign body that was lodged on the palate of this canine patient.
Caries or cavities can occur due to ‘degradation of dental hard tissue caused by demineralization due to acids released during bacterial fermentation of carbohydrates’ (as defined by the AVDC). Although it is possible for your pet to get a cavity, it is not common.
FELINE GINGIVOSTOMATITIS IS SEVERE INFLAMMATION OF THE GLOSSOPHARYNGEAL ARCHES CAUSING SEVERE PAIN AND POSSIBLE DECREASED APPETITE. THE CAUSES OF THIS DISEASE PROCESS ARE UNKNOWN. THE BODY IS REACTING TO THE BIOFILM (PLAQUE) THAT FORMS ON THE TEETH, CAUSING THE INFLAMMATION TO OCCUR.
CHRONIC ULCERATIVE PARADENTAL STOMATITIS IN DOGS IS ALSO A SEVERE INFLAMMATION OF THE SOFT TISSUES IN THE MOUTH. IT'S CAUSES ARE ALSO UNKNOWN. THIS CONDITION CAN BE VERY PAINFUL AND MAY CAUSE DECREASED APPETITE.
FELINE TOOTH RESORPTION is when the hard structures of the tooth are resorbed back into the body. The cause for this is unknown but it can be fairly common in any breed of cat. There is currently no way to prevent tooth resorption and the only treatment options are extraction of the tooth or a crown amputation. If the resorption is happening above the gum line this can be very painful for your cat.
MAXILLARY OR MANDIBULAR FRACTURES ARE GENERALLY CAUSED BY A TRAUMATIC EVENT IN WHICH EITHER THE MAXILLA OR THE MANDIBLE (JAW) ARE BROKEN. THERE ARE SEVERAL TYPES OF FACIAL FRACTURES AND SEVERAL WAYS TO FIX THEM.
MANDIBULAR FRACTURES CONTINUED
ORAL MASSES CAN EITHER BE BENIGN OR NEOPLASTIC (CANCEROUS). THERE ARE MANY TYPES OF ORAL MASSES AND A FEW TREATMENT OPTIONS FOR THEM. THE FIRST STEP IS HAVING A BIOPSY DONE AND DIAGNOSTIC IMAGING (DENTAL X-RAY OR A CT SCAN). ONCE THE TYPE OF TUMOR IS DETERMINED A PROPER TREATMENT PLAN CAN BE MADE.
ENAMEL HYPOPLASIA refers to inadequate deposition of enamel matrix. This can affect one or several teeth and may be focal or multifocal. The crowns of affected teeth can have areas of normal enamel next to areas of hypoplastic or missing enamel (as defined by the AVDC).
ABRASION AND ATTRITION ARE TOOTH WEAR OVER TIME. ABRASION IS CAUSED BY OUTSIDE FORCES SUCH AS BALLS OR CHEWING ON OBJECTS. ATTRITION IS CAUSED BY TOOTH ON TOOTH CONTACT USUALLY DUE TO A MALOCCLUSION.
ABSCESSED TOOTH
DENTIN DYSPLASIA TYPE 1:
DENTIGEROUS CYST is a cyst that forms around an unerupted tooth.