The Complete Dental Prophy

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What you will need:
- 1. Oral Rinse (0.12% chlorhexidine)
- 2. Prophy Pack (periodontal probe, etc)
- 3. Ultrasonic scaler/hand scaler/currettes
- 4. Revealing solutions
- 5. Polish
- 6. +/- Fluoride, oravet
- 7. Canine or Feline Dental Charts

Role of Antibiotics:
- Antibiotics are not usually indicated unless the patient is immunosuppressed or has an underlying cardiac issue.
- A dental prophy will cause a transient bacteremia, however in a healthy patient—the immune system will clear this in 30-40 minutes.

When Antibiotics are Recommended Before a Dental Prophy:
- Severe Periodontal Disease ("sewer mouth")
- Diabetic Patients, immune compromised patients
- Patients with Heart Problems (ex. Endocarditis)
- Patients with implants (ex. Hip, Knee surgery, Cataract surgeries, etc). These implants can become a nidus for bacteria

What Antibiotics to Choose From?
- Clindamycin
- Clavamox
- Amoxicillin/ Metronidazole
- Convenia injection—?
Complete Dental Prophylaxis:
- Not simply removing dental calculus from the crowns of teeth to make them “look” pretty.
- It is an important component of overall patient health care.
- Proper Instrumentation is important
- A complete prophy in a patient once they are anesthetized typically takes:
  - Cats: 20-30 minutes (this does not include x-rays)
  - Dogs: 40-60 minutes (this does not include X-rays)

Proper Patient Positioning:
- Once general anesthesia is induced, the patient is intubated.
- The preferred position is dorsal recumbancy in a slight gravity dependent (head lower than tail) position to promote drainage of water & other irrigation solutions from the oral cavity.
- Mouth Gag/Gauze is needed to pack the back of the throat (need a system to remember to remove this at the end in place)

Step 1: Oral Examination:
- The recognition & recording (charting) of various abnormal findings is essential to appropriate treatment planning & follow-up.

Step 1: Oral Examination:
- Starts on the Awake Patient:
  - Observation/Palpation of head
  - Eyes (do they retropulse)? (especially cats)
  - Muzzle including lips & nostril conformation
  - Lymph node palpation
  - Observation of tongue & tonsils
  - Occlusion (is it normal?) (normal for breed?)
  - Overall impression of oral health
  - Observation of specific things the owner has noted

Step 1: Oral Exam Continues in Anesthetized Patient:
- Important Conditions to Recognize & Record:
  - Malocclusion
  - Missing teeth (are they truly missing, fractured or impacted?)
  - Extra teeth (supernumerary, retained deciduous?)
  - Fractured teeth (uncomplicated, complicated, crown-root fxs)
  - Mobile teeth (grade 1,2,3)
  - Enamel loss (fracture, wear, or abnormal development)
  - Dental plaque and calculus (grade 1,2,3)
  - Gingival health (grade 1,2,3)
  - Mass or ulcerative lesions
  - Measurement of gingival sulcus (periodontal pocket) depth.
  - Caries (cavities), external root resorptive lesions—use explorer

Step 2: Supragingival Scaling
- The removal of dental plaque & calculus on the crowns of the teeth
- 1 - Protection of Personnel
  - Aerosolizing of bacteria & debris
  - Wear surgical face mask and eye protection
  - Surgical cap/exam gloves
  - Chlorhexidine rinse to set for 5 minutes
Step 2: Supragingival Scaling:
- 2- Hand Scaling
  - Thick, adhered calculus may need to be partially removed by hand before using ultrasonic scalers
  - True hand scalers are not to be used subgingivally—currettes only to be used below the gumline.
- 3- Power Scaling
  - Most commonly used
  - Calculus is removed from the enamel surface by vibration
  - This high power vibration creates heat that can penetrate the tooth and create damage to the pulp (thermal injury)
  - Distilled water spray is needed, never touch the tooth with the tip, do not stay on one tooth surface for more than 5 seconds!!!
  - Rapid, overlapping, short strokes, are made over the tooth surface

Step 3: Subgingival Scaling:
- Most problems in our patients are below the subgingival margin
  - Neglected subgingival calculus will promote periodontal disease and must be removed
  - If periodontal disease is already present & the periodontal pocket is greater than 4-5mm in depth, surgical reflection of gingival flaps may be necessary to perform correct scaling
  - Once all plaque & calculus have been removed, a disclosing solution is applied to the crowns of the teeth by direct application, excess is rinsed away with water and teeth are examined (what was left behind?)

Step 4: Polishing the Teeth:
- The rubber cup is gently pressed against the tooth surface until the cup flares out. The flared edge should be used subgingivally
- The cup is continually moved over the tooth surface in a slurry of paste
- Thermal injury to the pulp will occur if:
  - Insufficient prophy paste is present
  - Excessive pressure is applied
  - More than 15 sec of continuous polishing is performed on 1 tooth
Step 5: Diagnostics and Sulcular Lavage
- The teeth are carefully examined. A dental explorer is used to detect cervical level caries and resorptive lesions.
- The gingival sulcus/periodontal pocket depth is measured.
- A periodontal probe is gently passed into the gingival sulcus & the sulcus depth is noted.
- Normal: Cats: 0-0.5mm; Dogs: 2mm or more depending on the tooth (4-6mm canine teeth).

Abnormal pocket depth may be an indication of periodontal (active or inactive) disease.
- It is necessary to remove all debris from any pocket.
- In the presence of a deeper pocket containing debris & associated with inflammation, root planning is performed with the goal of regaining some of the lost attachment.

Step 6: Dental Radiographs:
- Perform on all pets for a Baseline—Yes ☺
- Take when pathology is present?
  - Fractured teeth
  - Missing teeth
  - Periodontal disease
- Take on all feline patients
- **A high percentage of pathology is found on radiographs, that isn’t detected on the routine dental examination**

Step 7: Home Care Instructions:
- Diet
  - Dry food (+/-)
  - Hill’s t/d; Royal Canin Dental Health
  - Tartar Shield products, CET forte chew
- Chew Toys
  - Kongs, Flush toys
  - No: Nylabones, marrow bones, cow hooves, rope toys.
- Plaque inhibitors, oral cleansing agents
  - Chlorhexidine solution or gel, Aquadent/oxyfresh, Maxiguard
- Toothbrushing
  - Daily is ideal and the best home care available
  - Many varieties available
  - Demonstrate to owners
  - Only buccal surface of teeth need to be brushed in most cases
  - Only non-fluoride toothpaste to be used

Oral Exam every 6-12 months:
- Some pets need a dental cleaning every 6 months. Others every 1-2 years
- OraStrip Quick Check
Instrument Care:

- Hand scalers and curettes will need periodic sharpening to maintain their sharp edges
- Power instruments are wiped with disinfectant or sterilized between each patient
- Prophy cups are disposed of after each patient use
- Dental machines are maintained according to the manufacturer’s instructions
  - Oil, distilled water only, compressor care etc