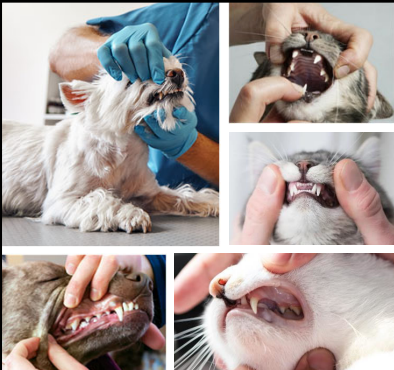


1

Periodontal Disease

- Periodontal disease is the most prevalent disease in both dogs AND cats
- Oral health is correlated with systemic health
- Pet owners are recognizing that their pet's oral health is important


2



Flip the Lip!

- Oral examination
- Every pet, Every time

3



Dental Cleaning Procedures

- A dental cleaning = different things to different people
- Explain to client
- Helps eliminate the unknown for clients
- Assures clients of your expertise

4



5



6



7

Periodontal
Disease
Staging

**UNDERSTANDING
ORAL CARE**

SIGNS

- Bad Breath
- Bleeding
- Yellow or brown buildup on the teeth
- Redness or swelling gums
- Change in bleeding/teeth health
- Teeth feel loose wobble

Stages	STAGE 0 (CLINICALLY NORMAL)	STAGE 1 (MILD)	STAGE 2 (EARLY PERIODONTITIS)	STAGE 3 (MODERATE PERIODONTITIS)	STAGE 4 (SEVERE PERIODONTITIS)
Plaque	•	••	••••	••••	••••
Tartr	•	••	••••	••••	••••
Discoloration	•	•	••	••••	••••
Swelling	•	•••	••••	••••	••••
Bleeding on Probing	•	••••	••••	••••	••••
Probing Depth	•	••	••••	••••	••••
Periapical Radiolucency	•	••	••••	••••	••••
Systemic Inflammation	•	••	••••	••••	••••

ORAL CARE

- Daily brushing with soft-bristled toothbrush
- Professional cleaning and dental X-rays
- Professional dental sealant
- "Good" Approved Dental Seal & Dental Treat
- Local antibiotics

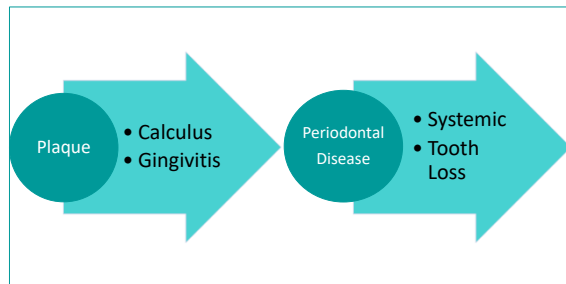
8

Comprehensive Oral Health Assessment and Treatment (COHAT)

- Assessment of the whole mouth
 - oral exam
 - dental X-ray
- Patient's overall health
- Treatment plan created

9

Educate the client



10

Systemic Health



11

Oral Examination

Conscious

- Limited to visual & digital exam
 - Prepare & educate clients re: anticipated findings → general anesthesia
 - Protocols to ↓ anxiety
- OraStripdx
- More than just oral cavity
- Palpate
- Medical Record

12

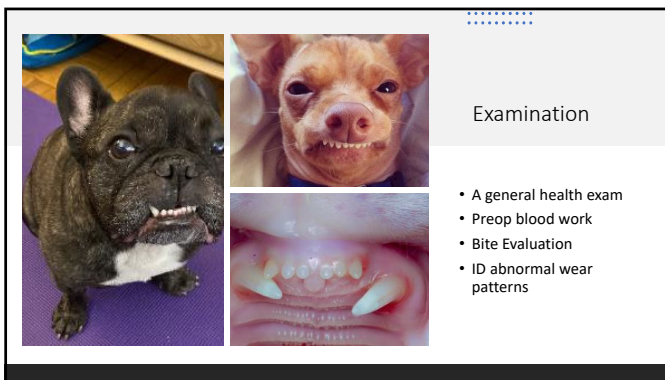


Oral Examination

Conscious

- Signs = oral disease
 - Abnormal - medical record
 - Conscious oral evaluation → opportunity
 - demonstrate oral pathology
 - educate client - treatment options
- Spectrum of treatment options → gathered rads & anesthetized oral exam
- Discuss findings → client = treatment

13



Examination

- A general health exam
- Preop blood work
- Bite Evaluation
- ID abnormal wear patterns

14

Periodontal Disease Testing



- Visual exam of oral cavity ≠ disclose full extent of progressive periodontal dz
- OraStripdx → routine patient work-up = detect thiol concentrations that reflect active periodontal dz
- Concentration of thiols - oral fluids = progression of periodontal disease
- OraStripdx - incorporate into wellness exams w/ dx tests (fecal, heartworm, blood work)

15

Principle of Operation

OraStripdx™
Thiol Test



OraStripdx test result*	Probability of significant gingival inflammation	Probability of alveolar bone loss
Negative	0%	0%
+	>50%	>33%
+++	100%	100%

*Data taken from Quirk et al. JAAHA 2018;
see also Manfra et al. Can Vet J 2013.
†Goldstein et al. J Vet Sci Technol 2016.

- Rapid test: easily visible results in 10 seconds
- Glide white pad of test strip along maxillary gingival margin (upper gum line) of **awake** animal in exam room
- Development of **yellow color on pad** indicates presence of metabolites of pathogenic anaerobic bacteria in gingival sulcus, beneath gum line
- **More color = more metabolites = more pathogenic bacteria = call to action**: home care = full-mouth exam = COHAT
- Metabolites = sulfur compounds called thiols
- ↑ thiols – associated with tissue destruction – are produced as the gingival sulcus deepens → profound periodontal pocket → increasingly anaerobic
- OraStripdx - only way to detect periodontal disease **early** in the awake animal
- Provides objective visual basis for clear recommendations concerning procedures and home care

16



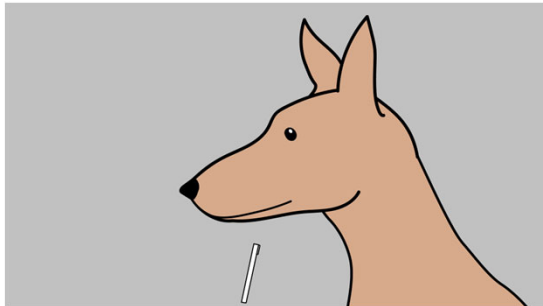
1
PLACE YOUR INDEX FINGER BEHIND THE NON-PAD SIDE OF THE ORASTRIP TEST.

2
GENTLY LIFT DOG'S UPPER LIP.



Periodontal Disease Testing

17



18

Periodontal Disease Testing - OraStripdx



19

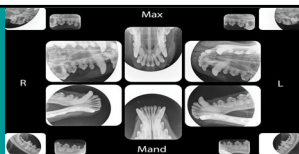
Anesthetized Examination

- Visual examination, probing, mobility assessment, radiographic examination, charting
- Individualized treatment → pet owner
- Customized treatment plan



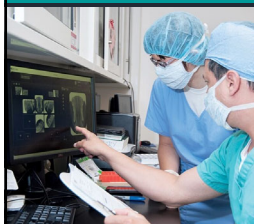
20

Radiographs



Essential part of oral exam

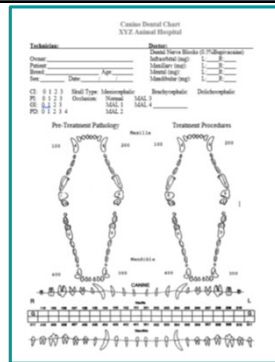
- Assess dental pathology subgingivally
 - 42% of pathology found by radiography
- Demonstrate dental pathology
- Show & tell - client
- ↑ revenue for clinic
- AAHA Dental Guidelines - recommends full-mouth intraoral dental radiographs - all dental patients



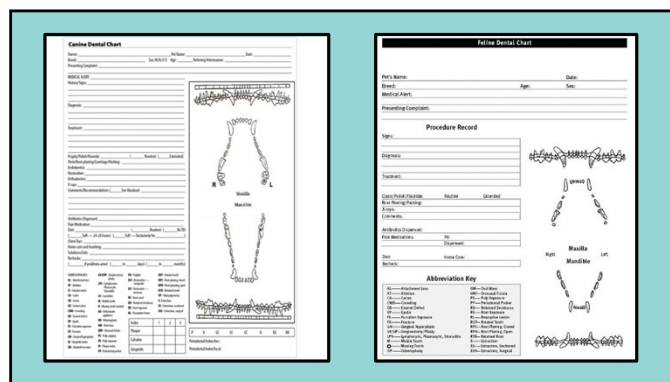
21

Charting


- Keep a record of patient oral health
- Track changes in oral health status
- Record of treatment
- Legal document



22



23



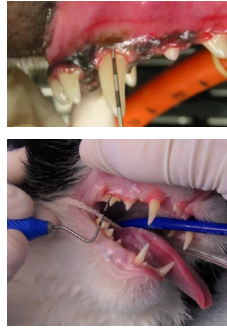
Periodontal Probes

- Marked in millimeter increments
- Used to measure:
 - Gingivitis
 - Gingival recession
 - Pocket depth
 - Loss of attachment

24

Periodontal Probes

- Normal sulcal depths:
 - Dogs are **0 mm to 3 mm**
 - Cats are **0 mm to 0.5 mm**
- Periodontal dz *cannot* accurately dx w/o periodontal probe → sulcal depth & IDs pockets.
- *Careful probing & dental radiographs* = critical to accurate assessment of periodontal health



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Explorer



26

Examination of the Periodontium


- Instrumentation
 - Periodontal probe
 - Dental explorer
 - Mirror
- Indices
 - Gingivitis
 - Probe depth
 - Gingival Recession
 - Furcation Involvement
 - Mobility
 - Periodontal Attachment



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Attachment Loss


Probe/Pocket Depth



Gingival Recession

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Furcation Exposure



Furcation 'score'	Description
F0 <small>(Do not have to record this)</small>	No furcation involvement. The probe immediately encounters alveolar bone.
F1	Initial furcation involvement: the operator can feel the furcation with the tip of the probe. Minimal horizontal bone destruction as the probe goes into the furcation less than halfway under the crown.
F2	Partial furcation involvement: horizontal furcation tissue destruction allows the probe in more than halfway under the crown, but not all of the way through.
F3	Total furcation involvement: the probe passes all the way through the furcation from the buccal aspect to the palatal/lingual aspect.

(Nemes, 2010; Barker, 2013).

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Mobility Index^a

M-0: Normal physiologic movement (<0.2 mm), not charted

M-1: Slight tooth mobility in any direction other than axial (0.2-0.5 mm)

M-2: Moderate tooth mobility in any direction other than axial (0.5 to 1 mm)

M-3: Severe tooth mobility in any direction other than axial (>1 mm)

^aAmerican Veterinary Dental College Nomenclature Committee.

Tooth Mobility

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31

Antiseptics

- Help reduce the number of bacteria
- Chlorhexidine gluconate
- Pre-rinse
- Reduces the number of aerosolized bacteria

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Brushing

- Thoroughly brush all the teeth
- Rinse with air/water syringe
- Removes over 80% of bacteria

33

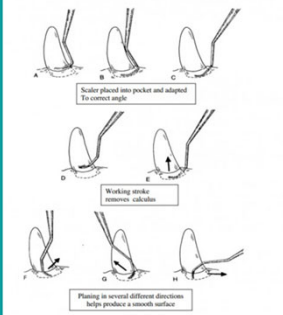
Removal of Gross Calculus



- Fairly quick method
- Longer tip placed over the crown, the shorter under the calculus
- Calculus cleaved off when tips brought together
- Avoid damage to enamel and gingiva
- Avoid iatrogenic slab fracture

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All the following diagrams courtesy of and with the permission of Dr. Ed Eimer, from Holbrook, Frost, and Eimer, *Essentials of Dental Techniques*.



Hand Scaler

- Supragingival removal of calculus
- NOT below gumline
- Effective in removing calculus → developmental groove of 4th premolar
- A pull stroke - remove calculus

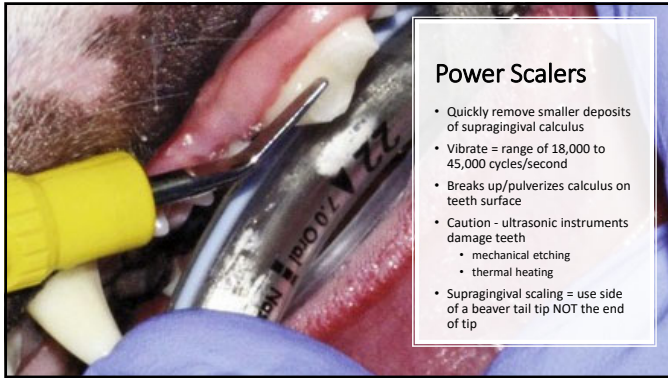
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Curette

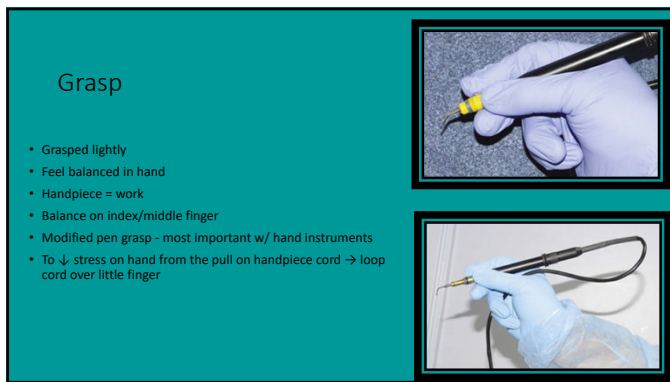
- Two sharp sides with blunt tip
- Remove calculus above & below gingiva
- Subgingival curettage
- Root planing



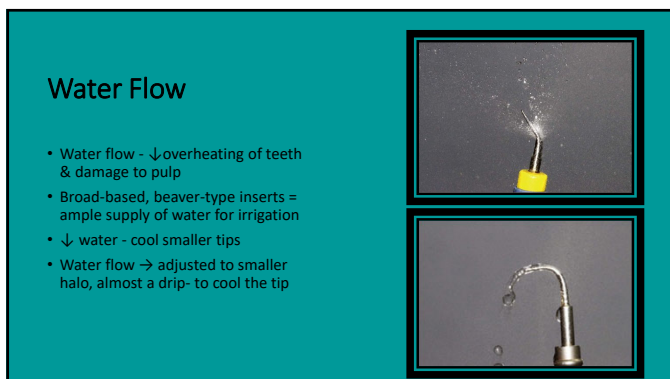
36



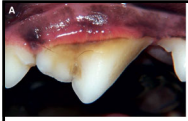
37



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Periodontal Therapy using an Ultrasonic Scaler

40

Subgingival Cleaning

Debris removable vital to the success of treatment

- Proper curette - selected based on its angulation
- ↓ number - less the angle - further rostral in the mouth
- face of curette
 - placed flat against surface of tooth
 - inserted gently to the base of the sulcus/pocket
- instrument rotated - shaft is parallel to the long axis of tooth

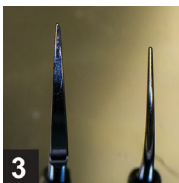


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Subgingival Cleaning

Debris removable vital to the success of treatment

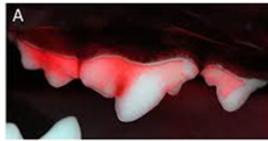
- Traditional ultrasonic scalers ≠ used subgingivally = thermal damage to gingiva and pulp.
- sonic & ultrasonic scalers with specialized periodontal tips → subgingival use



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Evaluation

- Explorer for supragingival calculus
- Curette for subgingival calculus
- Disclosing solutions
- Plaque Detecting Light
- Air drying



43

Polishing

- Scaling = rough surface = ↑ plaque attachment
- Polishing smooth tooth surface ↓ plaque attachment
- Prophyl cup on a slow-speed hand-piece with a 90-degree angle
- Handpiece ≤ 3,000 RPM
- Adequate polish - all times
- Slight pressure → tooth to flare prophyl cup edges → polish subgingival
- 5 second/tooth



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Sulcal Lavage

- Debris = calculus, prophyl paste
- Visible deposits & microscopic debris
- → infection; inflammation
- Gentle lavage
- Performed w/ blunt ended cannula
 - placed gently into the sulcus
 - solution is injected - slowly moving along the arcades
- Sterile saline
- 0.12% Chlorhexidine solution



45

Rinse

- Help reduce the number of bacteria
- Chlorhexidine gluconate
- Pre-rinse
- Reduces the number of aerosolized bacteria



46

Pet Owner Education

- Review dental charts and radiographs
- Reinforces the importance
- Educate



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Effective dental home care provides plaque and calculus control between professional treatments



PROCEDURES AND PRODUCTS THAT
CLIENT USE ON THEIR PETS



CRITICAL ADJUNCT TO
PROFESSIONAL INTERVENTION



ESSENTIAL TO SUSTAIN THE SUCCESS
OF PROFESSIONAL PERIODONTAL
THERAPY

48

Effective dental home care provides plaque and calculus control between professional treatments



THOUSANDS OF PRODUCTS
AVAILABLE WITHOUT EVIDENCE
TO SUPPORT EFFICACY



CONFUSING AND MISLEADING TO
MANY PET OWNERS



THE VETERINARY HEALTH CARE
TEAM IS THE BEST RESOURCE FOR
MAKING APPROPRIATE
THERAPEUTIC AND HOME CARE
RECOMMENDATIONS

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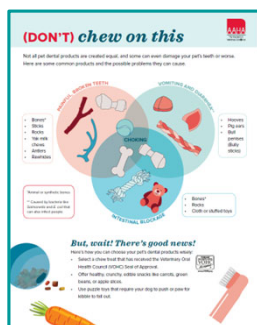
Oral health is a combination
of professional therapy and
effective substrate control

- Not a once-a-year procedure
- Not a 'one product fits all'

50

Homecare

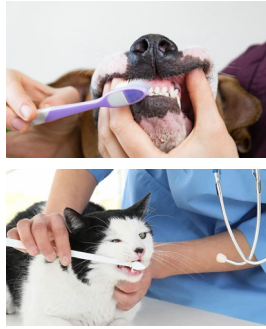
- Individualize for patient
- Pathology of patient
- Individual champion
- Number to call
- Written discharge to send home



51

Homecare

- Periodontal pockets reinfected w/in 2 weeks of prophylaxis
- Gold standard
- 1. Tooth brushing
 - Circular motion w/brush at 45° angle to gingival margin
 - Ideal – 1x/day
 - 3 days/week - minimum
 - Periodontal disease = daily brushing
- 2. Rinse w/ chlorhexidine solution
 - ↓ gingivitis



52

Homecare

- ↑ compliance
- Important = long-term consistency - effective dental care
- Nutrition - diets ↓ tartar & plaque build-up
- Chews & treats - tartar control
 - ↓ plaque +/- calculus
 - 2 have been clinically proven to ↓ gingivitis



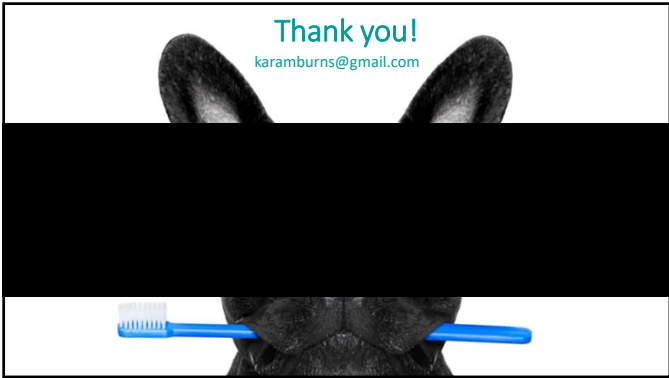
53

Homecare

- Owner compliance
- Pet Acceptance
- Pet's Pathology
- Make a SPECIFIC recommendation



54



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