How well does an oral examination detect periodontal disease?

A.E. Bauer, J.L. Stella, M. Lemmons, C.C. Croney

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February is National Pet Dental Health Month

Most dental disease occurs below the gum line, where it’s hard to see.

Most dental disease occurs below the gumline, where you can’t see it. Start a discussion with your veterinarian today about your pet’s oral health.

avma.org/podental
Stage 0

No plaque or calculus
Normal gums

No bone loss

http://www.toothvet.ca/services.html
http://avdc.org/AFD/five-stages-of-pet-periodontal-disease/
Stage I
Mild amount of plaque
Gums are mildly red
No bone loss
Reversible

http://www.toothvet.ca/services.html
http://avdc.org/AFD/five-stages-of-pet-periodontal-disease/
Stage II

Moderate amount of plaque
Redness and swelling of the gums

Bone loss of 0-25%
Irreversible

http://www.oralatp.com/?p=53#pd_2

http://avdc.org/AFD/five-stages-of-pet-periodontal-disease/
Stage III

Tartar is present
Gums are pulling back from the teeth (receding) or enlarging (hyperplastic)

Bone loss of 25-50%
Irreversible

http://avdc.org/AFD/five-stages-of-pet-periodontal-disease/
http://www.oralatp.com/?p=53#pd_2
Stage IV

Heavy tartar
Severe inflammation of the gums
Evidence of infection or tooth loss

Greater than 50% bone loss
Irreversible

http://www.dentalvet.com/vets/basicdentistry/whywhenhow_radiology.htm
http://avdc.org/AFD/five-stages-of-pet-periodontal-disease/
How well do you know your dog's teeth and gums?

Radiographs under anesthetized conditions

http://avdc.org/AFD/what-is-a-professional-veterinary-dental-cleaning/

http://www.oralatp.com/?p=53#pd_2
Materials and Methods

- 2 raters with clinical experience
- 89 client owned dogs from 3 veterinary facilities
  - Evaluated by the rater(s) prior to anesthesia
  - Categorized by the attending veterinarian after anesthetic examination and radiographs
Results

Agreement between raters by periodontal disease stage

- Stage 0: Agree 50%, Disagree 50%
- Stage I: Agree 33%, Disagree 67%
- Stage II: Agree 50%, Disagree 50%
- Stage III: Agree 80%, Disagree 20%
- Stage IV: Agree 67%, Disagree 33%

Legend:
- Green: Agree
- Yellow: Disagree
Discussion

Realistic treatment planning based on the dental x-ray and examination of the patient's oral cavity is crucial for ensuring the best possible outcomes. The x-ray image shows the roots and the bone structure, which are essential for assessing the health of the teeth and gums. The visual examination of the mouth confirms the presence of certain dental issues that may require professional intervention. Effective treatment planning involves considering both the x-ray findings and the clinical assessment to develop a comprehensive treatment strategy.
Recommendations

Flip the lip

Think beneath the surface

http://www.scubadiving.com/explore-best-kept-secret-dive-spots-around-globe
Recommendations

Stage 0 or I monitor for progression

◊ Focus on preventive care

Stage II needs veterinary evaluation

◊ Bone loss is not reversible, but further bone loss can be prevented
Stage III or IV need veterinary care as soon as possible

- **Pain management**

- **Disease in other parts of the body**
  
  Glickman, et al., 2011; Lemmons, 2009

- **Reproductive consequences**

  Xiong, et al., 2006
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