Foundations of Dentistry:
Awake & Anesthetized Oral Exam and Dental Blocks
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Similar to a general physical examination

- Oral examinations should have history taken
    - You not only learn a lot about your patient,
    - You learn a lot about the owner's understanding and views on oral health
- Questions I always ask in wellness exams:
    - "When was their last COHAT/dental cleaning?"
    - "What daily oral hygiene habits or products are you using?"
    - "What toys do they play with? Are they chewing focused?"
    - "What diet and treats do they get?"
        - "Any texture preferences?"
    - "Any changes in eating habits? Toy use or play?"
- Questions I ask when presented with *"Oral Pain"* complaint:
    - "WHEN did the pain start?"
        - "When are you seeing this pain?"
            - Ie. what activities?
    - "WHAT specifically are you seeing?"
    - "What have you given them or done that helped?"
    - "What do you think the problem is?"
    - "When/how did you notice this problem?"

Conscious oral & maxillofacial examination

Start with observation from a distance

- Vital point, as with any physical exam
- This is the BEST time to note any asymmetry

Next is Palpation

- Muscles of Mastication
- Skeletal symmetry
- Lymph Nodes
- RETRO-pulse globes

NEXT, CLOSED mouth examination

- Thumb & index finger over/around muzzle
- Lift lip with jaw closed
    - entire buccal surface of teeth and mucosa
- Check OCCLUSION
- Count teeth
- Note plaque, calculus & gingivitis
    - ASYMMETRY

FINISH with opening oral cavity

- Most resented part of exam
- Will only get a very brief look
    - Hard & soft palate, tongue, TMJ ROM

Anesthetized oral & maxillofacial examination

Dental Charts

- Find one that works for you and USE it every time
    - This is your medical record for your oral examination
- Make sure to have adequate space to comment on EACH "patient"
    - The AVDC has a list of abbreviations to save room
- Do NOT forget the non-tooth examination findings
    - Also have space for all part of your maxillofacial examination

Your Equipment:

- Probes:
    - Make sure you know the markings for YOUR probe(s)
        - Williams: 1, 2, 3, 5, 7, 8, 9 & 10 mm
        - Marquis: 3, 6, 9, 12 & 15 mm
    - AND the normal probing depths
        - DOG <3 mm*
            - Consider the size of your "patient"
        - CAT <1 mm
- Mirror
    - "the most underappreciated dental instrument"
    - Don't miss ANYTHING
    - Hard to SEE places
    - Can help will illumination and retraction

- Explorer
    - NEEDED to confirm or rule out pulp exposure
    - Finding Tooth Resorptive lesions

REGIONAL ANETSHESIA

WHY:

To reduce pain by performing prior to dental extraction:

- Local anesthetic BLOCKS sodium channels and thus inhibit formation of action potentials
    - This prevents TRANSDUCTION: the first step in the pain pathway
- Local anesthetic reduces the general anesthesia
    - 23% reduction in Mac has been reported Snyder et al JAVMA 2013

WHAT:

Lidocaine

- Quick onset (5-10 minutes) and short duration (1-2 hours)

Bupivacaine

- Intermediate onset (20 minutes) and intermediate* duration (6-10 hours)
  *62% of dogs had MAC reduction at 24 hours [Snyder et al JoVD 2015]

Please do NOT mix these medications: unknown pharmokinetics with different pH/pKa

Can you add anything else for longer duration?

- Epinephrine: I do not use or recommend
- Buprenorphine: my personal preference [Snyder et al JoVD 2015]
- Dexmedetomidine: newer literature supports this

WHERE:

For ALL blocks:

* ASPIRATE every ¼ turn (90°) to ensure not along a vessel wall
* HOLD OFF for a full 1 minute: in case a vessel was transected

Infraorbital

- Needle *entrance*: infraorbital foramen = apical to third premolar
- Needle *depth*: only a few mm into the canal
- Desensitizes:
  - Ipsilateral incisors, canine, first & second premolar
    - Associated alveolar bone, gingiva & mucosa

Maxillary (deep infraorbital)

- Needle *entrance*: infraorbital foramen = apical to third premolar
- Needle *depth*: to the level of the lateral canthus
  - To get beyond the canal to the maxillary nerve PRIOR to entering canal

  STAY PARALELL TO PALATE: to AVOID globe
- Desensitizes:
  - All dentition ipsilaterally
    - Associated alveolar bone, gingiva & mucosa, palatal mucosa, lip & nose

Mental nerve block: I do not routinely perform.

Inferior Alveolar

- Needle *entrance*: distolingual line angle of the last molar OR
  - Transition between mandibular body and coronoid (ramus)
- Needle *depth*: HALFWAY between entrance and angular process of manible
  - To get beyond the canal to the maxillary nerve PRIOR to entering canal

  STAY CLOSE to the lingual aspect of the mandible: to AVOID lingual nerve
- Desensitizes:
  - All dentition within the quadrant
    - Associated alveolar bone, gingiva & mucosa