Complications of Extraction



Dr. Angelica (Angie) Bebel, DVM, DAVDC West Coast Veterinary Dental Services, Vancouver, B.C Email: tembo4444@gmail.com Office Telephone: 604-473-3605





Complications of Extractions Root Fractures

- Common complication
- Avoid leaving roots behind
 - Clients must be made aware
 - If unable to retrieve, monitoring is recommended, and possible complications discussed
 - Roots with endodontic disease risk of continued inflammation
 - Osteomyelitis
 - Draining tracts
 - Chronic pain

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Complications of Extractions Root/Root Tip Displacement

- · Displacement into the mandibular canal maxillary recess, nasal cavity
- Can occur due to:
 - Excessive force, misuse of instruments
 - Compromised periapical bone
- Careful planning to prevent
 - Radiographs
 - Clinical evaluation
- Improve visualization (flaps)







Complications of Extractions Root/Root Tip Displacement

- Ideal to remove
- Consider referral if this is possible
- Can see it through surgical site, carefully remove using plain forceps or a narrow-beaked extraction forceps
- Cannot be removed after the complication arises and referral is not possible, best to leave the root as retrieval with various instruments can damage nearby vessels and nerves
 - Radiographs should be obtained to document the root's location
 - Inform client
 - Clients should watch pet for signs of pain or paresthesia (pawing at or rubbing the face following the procedure)

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Complications of Extractions Root/Root Tip Displacement

- If the root/root tip is left in the maxilla:
 - observe for nasal discharge
 - report persistent sneezing or nasal discharge promptly.
 - sequestrum rare
 - rhinotomy should be performed to remove the root fragment.











Complications of Extractions Soft Tissue Trauma

- Orbital penetration
 - Infection
 - Possible enucleation
 - Avoid
 - careful positioning of the luxator or elevator between the tooth and bone on the mesial and distal (rather than buccal and lingual) aspects of the tooth
 - use of finesse rather than force during extractions
 - Proper instrument handling (finger stop)

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Complications of Extractions Soft Tissue Trauma

Orbital penetration

Ocular Trauma Originating from Within the Oral Cavity: Clinical Relevance and Histologic Findings in 10 Cases (2003-2013) Felicia D. Duke, DVM; Christopher J. Snyder, DVM; Ellison Bentley, DVM; Richard R. Dubielzig, DVM

- Clinical panophthalmitis, 3 days to 6 weeks following dental
- Histology contaminated, traumatic perforation and panophthalmitis
- Poor prognosis Should have immediate evaluation and aggressive intervention if it is notices at the • time of the dental
- presenting complaints : "red eye," Squinting
- Discharge
- Hypopyon
- pain/ change in behavior

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Complications of Extractions Facture of the Alveolar Process

Part of alveolar bone removed with the tooth

- Often buccal bone
- Abrupt/awkward extractions movements
- Premature use of extraction forceps
- Ankylosis
- Treatment
 - If removed with bone, smooth remaining edges
 - If remains attached to periosteum can reposition and suture flap

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Complications of Extractions Injury to adjacent teeth

- If adjacent teeth are used as a fulcrum during elevation
 - superficial fracture and does not involve pulp, the fracture edges are smoothed (odontoplasty) and a light-cured dentinal sealer is applied.
 - If pulp is exposed, the affected tooth must be treated endodontically (with vital pulp therapy or root canal treatment) or extracted. This complication can be

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Complications of Extractions Fracture of instrument

- Uncommon
- Causes
 - from excessive force during luxation or elevation, incorrect use of luxators as elevators,
 use of burs for multiple
 - procedures
- Treatment:
 - Removal if visible
 - Radiographs confirm complete removal





Complications of Extractions Mandibular Fractures

- Usually occurs during extractions of mandibular canines or mandibular first molar
 - Lingual alveolar bone 2-3 mm thick
 - Premature use of the extractions forceps in twisting manner results in fracture through lingual alveolus
 - Canine extractions parasymphyseal fracture or at the apex
 - Mandibular symphyseal separation
- Pathology can increase risk
 - Periapical changes
 - ALWAYS radiograph

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Complications of Extractions Mandibular Fractures

Treatment

- Stability needed, refer if possible
- Cloth or tape muzzle
- Treatment will depend on the location of the fracture, what pathology is present, missing teeth
- Can involve:
 - Interosseous wires
 - Interdental wires
- Splint
- Plates
- Ideal minimally invasive is best, preserve teeth if possible

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Complications of Extractions Nerve Damage

- inferior alveolar nerve, mental nerves, lingual nerve, and infraorbital nerve
- Causes:
 - Local anesthesia
 - Incision
 - Heat
 - Removal of root remnant in mandible
- Neuropraxia (temporary interruption in nerve conduction
 - Clinical signs
 - Pins and needles, burning sensation, numbness
 - usually resolve in few days but can take weeks

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Complications of Extractions

- Air embolism
 - air-water syringes and air-driven dental handpieces
 - introducing air into blood vessels can be fatal
 - Use caution
 - Alveoplasty to remove teeth

Post –operative Complications

Complications of Extractions

Nerve Damage

• Axonotmesis (degeneration of nerve axons)

· Signs of persistent pain postoperatively

condition)

• gabapentin

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• Neurotmesis (permanent interruption of nerve

• Hiding, pawing at the face, difficulty prehending or

masticating food, reluctance to groom for more than 1 week after surgery) examine extractions site with xrays.

• no root fragments and the soft tissues have healed

uneventfully, neuro- pathic pain should be considered.

- Swelling
- Pain
- Infection
- Delayed healing and dehiscence
 - Systemic factors (diabetes, Cushing's, chronic steroids use)
 - Local factors (infection, sharp bone margins, root remnants, tension at flap, insufficient elevation of periosteum, opposing teeth
 - Neoplasia





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Post –operative Complications

Oronasal communication







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