



Equine Dentistry

Faculty and resident veterinarians in the Equine Medicine and Dentistry Service diagnose and treat over 300 horses a year with disorders of the teeth, mouth or sinuses. Routine and advanced dental procedures include:

- comprehensive oral examinations and periodontal treatments
- state-of-the-art imaging modalities
- restorations and fillings
- endodontics
- teeth extractions and occlusal equilibration
- minimally-invasive buccotomy



Team effort – Equine dentistry veterinarians work closely with other clinical services at the veterinary teaching hospital in order to provide the most comprehensive and effective care for their patients. These include the diagnostic imaging service, surgery, and the large animal anesthesia service. Clinicians also work in concert with referring veterinarians to ensure they are kept regularly informed of the patient’s progress

Unlocking the secrets of EOTRH – Researchers are hard at work studying Equine Odontoclastic Tooth Resorption and Hypercementosis (EOTRH), a painful inflammatory disease of the roots that results in resorptive lesions of the incisors and sometimes canine teeth. Currently, there is no known prevention for the disease, and affected teeth must be extracted in order to provide relief from pain. Researchers are trying to understand the pathophysiology of this disease, which is most often seen in middle-aged and elderly horses.

Modern tooth extraction methods –

- Researchers have pioneered a unique technique called coronectomy to cut away part of an affected tooth before extracting it. The cutting of the tooth creates a space, or gap, which allows clinicians to loosen the tooth, and avoid breaking the roots, and avoids the need to perform a more invasive procedure to remove the tooth.
- Clinicians utilize a cutting-edge procedure called a minimally-invasive *buccotomy when extracting fractured teeth or teeth fragments, which involves accessing the tooth through the horse’s cheek. This allows easier access and instrumentation; and with the use of specialized equipment, fractured teeth or tooth fragments can be extracted without having to go through the horse’s sinuses, which is far more invasive, complicated and traumatic for the patient.*

Advancing the art of nerve blocks - Dentistry researchers have pioneered a novel intraoral nerve block for horses similar to a human intraoral block. The horses’ nerve is numbed when the block is administered through the gum behind the last mandibular cheek tooth. Traditionally in equine dentistry, nerve blocks have been administered from outside the mouth. This new technique is more accurate, involves less complication and is safer for the horse.

Cutting-edge imaging support – Equine dentistry clinicians at the veterinary teaching hospital routinely employ intraoral radiography on horses prior to performing dental procedures, rather than the more common extraoral radiography. This technique assists them in more precisely determining the pathology of the teeth. Clinicians have access to CT and advanced digital videography, allowing them to further understand some diseases and better determine where a disease process may be located.

Educating the Industry - Dentistry faculty are regularly called upon to speak at national and international conferences about new advances in equine dentistry. They also offer professional continuing education workshops and laboratories on the UC Davis campus where veterinarians from throughout the country learn about the examination of the horse's oral cavity and anatomy, and the use of tools, imaging, and other advanced techniques.