

C-E.14 Equine Dental Surgery

Credits: 10 (100 hours)

Provider: Veterinary Postgraduate Unit – Institute of Veterinary Science

RCVS Content Covered

The following outlines the modular content as set out by the RCVS.

Basic Surgical Skills

- A sound knowledge of the principles of wound healing.
- Prevention of infection and spread of infection.
- Concepts of contamination and infection of traumatic wounds.
- Responsible use of antibiotics in Equine Dentistry.
- Analgesia.

Dental extractions

Candidates should be able to show knowledge of the principles and indications of techniques for dental removal including complications and post-operative management: Practical expertise in them is not expected.

- Safely and competent extraction of vestigial premolars (wolf teeth) and deciduous premolar caps when indicated.
- Principles and application of oral dental extraction when applied to incisors canines and cheek teeth, including correct usage and selection of extraction instruments
- Nerve blocks for oral extraction.
- Continuous infusion sedation techniques.
- A knowledge of the sites for trephination of the skull for both repulsion of teeth and investigation of sinus disease.
- An understanding of more advanced surgical techniques for dental extraction and an appreciation of when to refer cases to a centre of surgical excellence.

Fractured jaws and other Oral / Facial Trauma

Candidates should be able to demonstrate an understanding of

- Principles for repair of the commoner fracture configurations by wiring.
- Management of horses with facial trauma – including emergency tracheostomy.
- Repairing wounds to the lips and cheeks.

Endodontic Therapy

- Candidates should understand the basic principles of endodontic therapy. They are NOT expected to be able to perform these techniques.

Neoplasias

Candidates should be able to demonstrate an understanding of:

- common neoplastic conditions
- Sarcoids
- squamous cell carcinoma
- dental tumours.

Investigating the thin wasting horse

Candidates should

- Be able to consider and manage dental disease in the context of the horse's overall health and concurrent diseases.
- Be aware of the potential differential diagnosis and the various appropriate routes of clinical investigation.

The head shaker

Head Shaking is a complex clinical entity in which dental pathology can play a significant role. Candidates should:

- Be aware of the extensive possible differentials.
- Be able to undertake a logical investigation.

The Unilateral Nasal Discharge

- Candidates should be able to appreciate the significance of the unilateral nasal discharge and be able to conduct a thorough examination to determine the aetiology.
- Differential diagnosis – primary or secondary to dental disease.
- Ethmoidal haematoma, mycotic sinusitis, guttural pouch disease and malignancy.
- Means of investigation to include radiography and endoscopy.
- Creation of a frontal flap and other trephine sites.

Clinical Audit

- Evaluation of the success / failure of dental treatments.
- Development of a scientific evidence base for Equine Dentistry.

Aim of the Module

The aim of this module is to consolidate and advance undergraduate and practice experience to develop and practically apply knowledge to equine dental surgery.

Learning Outcomes

At the end of the module, candidates should be able to:

1. systematically apply in-depth knowledge of the surgical anatomy of the equine oral cavity and associated structures to case evaluation and planning;
2. synthesise appropriate protocols for surgical treatment of the equine oral cavity and associated structures;
3. apply sound clinical reasoning in the approach to dental problems, incorporating evidence from the diagnostic database and scientific literature as well as the ability to appropriately adapt to client, animal and practice factors;
4. critically appraise literature relevant to clinical cases in the topics covered and discuss how the literature can be used to inform practice;

5. demonstrate critical reflection on clinical work, recognising the truly unusual case and when a case is beyond personal or practice capabilities.

Module Structure

This module is divided into 4 Study Units as outlined below.

Study Unit 1: Basic Surgical Skills

- A sound knowledge of the principles of wound healing.
- Prevention of infection and spread of infection.
- Concepts of contamination and infection of traumatic wounds.
- Responsible use of antibiotics in Equine Dentistry.
- Analgesia.

Study Unit 2: Dental extractions

- Principles and indications of techniques for routine dental removal including complications and post-operative management.
- An understanding of more advanced surgical techniques for dental extraction and an appreciation of when to refer cases to a centre of surgical excellence.

Study Unit 3: Oral / Facial Trauma and neoplasia

- principles for repair of the commoner fracture configurations by wiring.
- Management of horses with facial trauma – including emergency tracheostomy.
- Repairing wounds to the lips and cheeks.
- common neoplastic conditions
- Sarcoids
- squamous cell carcinoma
- dental tumours.

Study Unit 4: Other Conditions involving dental disease

- The thin wasting horse
- The headshaker
- Unilateral nasal discharge
- Clinical audit: Evaluation of the success / failure of dental treatments.
- Development of a scientific evidence base for Equine Dentistry.

Assessment Strategy

1 x open book examination using a range of short answer questions, 3 x reflective case reports (1500 words each) and 1 x journal critique/journal club presentation (pass/fail)

PLEASE NOTE: It is your responsibility to ensure that you have access to sufficient appropriate cases where you were the primary decision maker to produce adequate material for the module. This may not be possible with some internship positions. You must also be aware of any limitations of your facilities that may make the accumulation of appropriate cases difficult or impossible.