

## C-E.17 Basic Equine Practice Part 3

**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.

#### **Musculoskeletal system**

The normal anatomy and function of the locomotory system. Basic lameness examination including nerve blocks and radiography. Ultrasonography.

- Be able to perform all nerve blocks used in lameness evaluation. Be able to perform intra articular blocks on all the commonly blocked joints
- below and including the carpus or hock.
- Recognise deformities of the hoof capsule, sand and grass cracks and advice on their management.

#### **Recognise and be able to manage the following:**

- Laminitis
- Tying up
- Tendon injuries – including the various theories as to treatment.
- Infectious joint disease
- OCD & other developmental diseases.
- DJD
- Management of the 'street nail' injury

#### **Neonatal medicine**

A knowledge of the normal physiology of the per partum foal, evaluation of the placenta, relevance of colostrums and the routine management of the post partum foal. Management of hernias and angular / flexural limb deformity.

Be able to diagnose and treat as required the following:

- Congenital abnormalities
- Neonatal asphyxia / maladjustment syndrome.
- Neonatal sepsis
- Meconium retention
- Infectious disorders of the foal especially R. equi. And Streptococcal infections.
- Viral, bacterial and parasitic enteric infections
- Icterus / Anaemia
- Developmental Orthopaedic Diseases
- Ruptured / patent bladder syndrome.

- Colic abdominal pain
- Managing the sick foal
- Basic Intensive care methods
- Referral and transportation requirements.

### **Special tests / techniques**

- IgG
- Plasma transfusions
- Blood transfusion

### **Oncology**

- Basic understanding and recognition of the common neoplastic disorders and the principles of apoptosis.
- Simple understanding of the prognosis (and therapy) for – Melanoma, Squamous cell carcinoma, sarcoids, and lymphosarcoma.

### **Therapeutics**

The function and use of the major drug groups.

- Antibiotics
- Steroids
- NSAIDS
- Anthelmintics
- Vaccines
- Analgesia
- Sedatives and tranquilizers
- Anaesthetic agents
- Electrolyte solutions / fluid therapy
- Other drugs.

### **Toxicology**

- Recognition of common toxic chemicals and plants.
- Antidotes and management of poisonings
- Forensic investigation of suspected poisonings and specimen collection and recording.

### **Surgical instruments and techniques**

- Recognition and use of basic surgical instruments.
- Suture patterns
- Suture materials
- Surgical drains,
- Wound repair and principles of wound healing
- Casting lower limbs.

## Aim of the Module

The aim of this module is to develop basic undergraduate knowledge and practice experience involving the approach to and management of equine diseases affecting the musculoskeletal system and neonatal foals as well as to develop knowledge and experience relevant to the areas of equine toxicology, therapeutics and surgery relevant to equine practice.

## Learning Outcomes

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

1. demonstrate in-depth understanding of the clinical disease syndromes and the approach to diseases affecting the musculoskeletal system and neonatal foal;
2. demonstrate the ability to recognise and to draw together a comprehensive knowledge of the prognosis and therapeutic options for common neoplastic disorders affecting the horse including financial, practical, ethical and welfare constraints in managing and providing veterinary advice for owners of affected horses;
3. demonstrate the ability to understand the principles of and synthesise protocols for equine surgery including selection and use of appropriate surgical instruments and suturing techniques as well as peri-operative care so as to minimise surgical infection, time to wound healing and post-operative complications;
4. critically evaluate the pharmacology and use of the major drug groups, and their applicability to the various body systems;
5. demonstrate a comprehensive understanding and practical application of legal and ethical aspects of drug use, including the cascade;
6. develop a forensic protocol to investigate toxicological problems in equine practice;
7. demonstrate the ability to utilise a sound clinical reasoning process, incorporating evidence from the diagnostic database and scientific literature as well the ability to appropriately adapt to client, animal and practice factors;
8. critically appraise literature relevant to clinical cases in the topics covered and discuss how the literature can be used to inform practice;
9. demonstrate critical reflection on their clinical work, including identifying potential clinical audit points translating to new protocols or measureable outcomes;
10. demonstrate the ability to recognise the appropriate case for onward referral.

## Module Structure

This module is divided into 6 Study Units as outlined below:

**Unit 1&2** will cover the diagnostic approach and management of diseases in horses affecting the musculoskeletal system and neonatal foals respectively. The focus is on the diagnostic approach, clinical reasoning process and evidence based medicine. In both units, a problem based or clinical syndrome based approach will also be utilised.

### **Unit 3** Equine Neoplastic Conditions

This unit will cover the diagnosis, pathophysiology, prognosis and therapeutic options for common neoplastic disorders affecting the horse.

### **Unit 4** Equine Toxicology

This unit will cover the clinical syndromes of common toxicological problems encountered in equine practice and discuss the forensic investigation of suspected toxicological problems in equine practice.

**Unit 5 Therapeutics**

This unit will discuss the pharmacological principles behind commonly used drugs and other therapeutic protocols used in equine medicine, and their applicability to the various body systems. Legal and ethical aspects of drug use will also be covered.

**Unit 6 Principles of equine surgery**

This unit will cover the principles of equine surgery including selection and use of appropriate surgical instruments and suturing techniques as well as peri-operative care so as to minimise surgical infection, time to wound healing and post-operative complications.

**Assessment Strategy**

3 x reflective case reports (1500 words each), 1 x open book short answer and/or MCQ test 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.