

## C-VD.4 Equine Dermatology

**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.

At the end of the module, candidates would be expected to have knowledge of the following subjects:

#### **Embryological development, anatomy, physiology and histology of normal skin and appendages, and response of the skin to insult**

Basic understanding of the basic embryology, structure and function of the skin:

- Epidermis
  - Structure
  - Melanocytes and skin pigmentation
  - Dermo-epidermal junction
  - Dermis
  - Subcutis
  - Adnexae
  - Hair follicles and hair growth cycle
  - Atrichial and epitrichial glands
  - Sebaceous glands
  - Structure and function of the hoof
- Basic understanding of the innate and adaptive arms of the skin immune system
  - Appreciation of how the above factors relate to clinical disease

#### **Common skin conditions**

Familiarity with the clinical presentations and therapeutic options of the following common skin presentations affecting horses:

- Pruritus
- Alopecia
- Pigmentary disorders
- Crusting and scaling
- Erosive and ulcerative diseases
- Cutaneous swelling, nodules and tumours
- Pastern dermatitis
- Disorders of the foot
- Management of dermatophytosis in a yard

#### **General approach to the equine dermatology case**

- Full dermatology history-taking and interpretation
- General clinical examination including the physical examination of the skin
  - Understanding of the presentations of the clinical signs
  - Concept of primary and secondary lesions
  - Description of lesions (morphology)
  - Ability to relate lesions to the differential diagnosis

### **Diagnostic tests**

Laboratory and other diagnostic techniques

- Examination for parasites
- Cytology
- Bacterial and fungal examinations
- Bacterial and fungal cultural techniques
- Intradermal and ELISA testing
- Indications for and techniques of skin biopsy
- Interpretation of a histopathology report

### **Therapeutics**

- Legal aspects
  - cascade system
  - food producing animals
  - knowledge of withdrawal times for drugs (Jockey Club rules)
- Principles of therapy, including routes and vehicles for administration of drugs
- Actions, uses and potential side effects of general therapeutic groupings including:
  - Antibacterial agents
  - Demonstrate appropriate use of antibacterials in horses
  - Implications of resistance
  - Antiviral agents
  - Antifungal agents
  - Antiparasitic agents
  - Glucocorticoids
  - Other anti-inflammatory and immunomodulatory agents
  - Allergen specific immunotherapy
  - Hydrotherapy
  - Keratolytics and keratoplastics
  - Cytotoxic agents
  - Vitamins
  - Minerals

## **Aim of the Module**

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

## Learning Outcomes

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

1. using case based examples, systematically evaluate horses presenting with dermatological disorders including recognition of the significance of history and clinical signs, formulation of a differential diagnosis list and application of appropriate testing in reaching an accurate diagnosis;
2. apply your knowledge of infectious dermatological conditions to design preventive health care plans;
3. recognise when a case is truly unusual, and become familiar with the information resources available to enable them to deal with such cases;
4. critically appraise the literature relevant to clinical cases in the topics covered and discuss how the literature can be used to inform practice while demonstrating the ability for critical reflection on their clinical work.

## Module Structure

**The syllabus will be divided into 4 study units**

**Study Unit 1:** This unit will cover the embryological development, anatomy, physiology, immunology and histology of normal skin and appendages and the response of the skin to insult.

**Study Unit 2:** This unit will focus on the general approach and diagnosis to the equine dermatology case.

**Study Unit 3:** This will focus on the clinical presentation of equine dermatological disorders

**Study Unit 4:** This unit will cover the range of therapeutic options in equine dermatology and their application to specific disease states.

## Assessment Strategy

2 x short answer question tests, 2 x reflective case reports (1500 words) 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.