C-VD.1 Veterinary Dermatology Core

Credits: 10 (100 hours)

Provider: Veterinary Postgraduate Unit – School of Veterinary Science

RCVS Content Covered

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

1. Structure and Function of Normal Skin and Epidermal Appendages

This covers the anatomy and histology of the skin and epidermal appendages. The focus is on the interaction between structure and function and how this can be altered during disease processes. This would include epidermal proliferation, differentiation and desquamation, in relation to their relevance to, and impact on, the common skin diseases.

2. Skin Physiology

This covers physiology relevant to dermatological structures. The focus will be on normal defence mechanisms and how these are altered in disease states. This would include: the principal defence mechanisms of the skin, including both physical and humoral mechanisms, with an awareness of the innate and adaptive arms of the skin immune system:

- Skin surface protection, immunological and non-immunological
- Inflammation and pruritus
- Physiology of wound healing
- Physiology of thyroid, adrenal and pituitary endocrinology as they relate to the skin in health and disease

3. Pathology Relevant to Dermatology

- This covers pathology relevant to the diagnosis of dermatological conditions. The focus will be on critical analysis of procedures, specifically the diagnostic accuracy and limitations of any diagnostic procedure. This would include:
- Surface skin and ear sampling techniques and the interpretation of cytology from common inflammatory skin diseases
- Normal versus pathogenic microbial flora of the skin and ear canal and the ability to differentiate these using in-house sampling techniques and laboratory submissions, including a basic knowledge of culture requirements
- The ability to understand how cutaneous pathology leads to the development of the skin lesions seen grossly and the difference between primary and secondary skin lesions
- The appropriate tests for ecto-parasites
- The appropriate use of skin biopsy and the basics of dermatohistopathological reaction patterns: how to obtain a sample and the information which the pathologist can and cannot provide
- Haematology / clinical chemistry / urinalysis as related to skin disorders
- Tests for endocrinological disorders affecting the skin and when they are appropriate
the indications for intradermal testing/ allergen specific serology/ limited antigen food trials and their limitations

**Aim of the Module**

The aims of this module are to:

- develop the depth and breadth of the candidate’s knowledge and understanding of the structure and function of the skin, how this is altered in disease states;
- develop a logical, systematic, and reasoned diagnostic approach to detect these disease states.

**Learning Outcomes**

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

1. demonstrate in-depth understanding of the anatomy and histology of the skin and epidermal appendages, their development and the changes seen in disease;
2. demonstrate in-depth knowledge of skin physiology, including immunology, wound healing and hormonal influences;
3. demonstrate a logical, reasoned and systematic approach to diagnostic testing in the investigation of dermatological conditions and demonstrating the ability to incorporate clinical reasoning and evidence based practice;
4. critically evaluate their clinical work to improve performance;
5. review and constructively criticise current literature in the subject area;
6. recognise when a case is truly unusual, and become familiar with the information resources available to enable them to deal with such cases.

**Module Structure**

The syllabus will be divided into 3 study units.

**Study Unit 1 Structure and Function**

The focus is on the interaction between structure and function and how this can be altered during disease processes.

**Study Unit 2 Physiology**

The focus will be on normal defence mechanisms and how these are altered in disease states.

**Study Unit 3 Clinical Pathology**

The focus will be on critical analysis of procedures, the diagnostic accuracy and limitations of any diagnostic procedure.

**Assessment Strategy**

Portfolio of cases (20 case log book), 4 x short answer question and/or MCQ tests, 1 x in-depth reflective case/essay at the end of the module (2000 words) and 1 x journal critique/journal club presentation (pass/fail)