C-E.10 Stallion Reproduction and Breeding Management

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.

- Normal structure and function of the genital system, including its endocrine control and factors affecting libido, mating behaviour, semen quality and fertility.
- Collection and evaluation of semen.
- Methods used in artificial insemination of fresh, chilled and frozen semen.
- Diagnosis, treatment and management of clinical conditions affecting the structure and function of genital organs and fertility of stallions.
- Diagnosis and treatment of common venereal diseases.
- Common non-reproductive conditions of the stallion.
- Common surgical treatments of the genital tract.
- Familiarity with the HBLB Codes of Practice.

Aim of the Module

The aim of this module is to develop an in-depth knowledge of the underlying theory and practical approach to reproduction in the stallion and breeding management.

This module will also incorporate the generic skills of evidence based medicine, clinical reasoning, literature review and critique, communication, clinical audit and reflection.

Learning Outcomes

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

1. demonstrate in-depth understanding of reproductive physiology in the normal stallion including endocrine control;
2. demonstrate a critical awareness of the pathological process involved in stallion reproductive problems including infertility;
3. demonstrate application of a sound clinical reasoning process in the approach to breeding management, assisted reproductive techniques and reproductive 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, including identifying potential clinical audit points translating to new protocols or measureable outcomes.
Module Structure

This module is divided into 3 study units as outlined below:

Unit 1: Reproductive Physiology and Breeding Soundness Evaluation
- Reproductive anatomy and physiology of the stallion
- Breeding soundness examination and semen collection
- Sperm physiology and evaluation of semen
- Microbiology and transmission of diseases through semen
- Management of the breeding stallion and stallion behaviour

Unit 2: Artificial Insemination
- Artificial insemination with fresh and chilled semen
- Artificial insemination with frozen semen
- Advanced methods in semen preparation
- Preservation of stallion genetics
- Equine genetics and the significance for the Equine Industry

Unit 3: Reproductive tract abnormalities and causes of infertility
- Reproductive conditions of the stallion: the testicle
- Reproductive conditions of the stallion: the penis
- Infertility in the stallion
- Surgical procedures of the reproductive tract
- Other problems in the stallion

Assessment Strategy

2 x open book examinations using a range of short answer questions, 2 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.