

C-VDI.5 Large Animal Diagnostic Imaging (B)

Credits: 10 (100 hours)

Provider: Veterinary Postgraduate Unit – School of Veterinary Science

RCVS Content Covered

Click [here](#) to view the module content as outlined by the RCVS.

Aim of the Module

The aim of this module is to develop a logical, systematic and reasoned approach to large animal diagnostic imaging of the upper limb, neck, back, pelvis, thorax and abdomen as part of their overall investigation of a case in a practice environment; To enable the candidate to critically evaluate their own standards of practice and develop strategies for continuous improvement in the future.

Learning Outcomes

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

1. critically apply the principles of radiological and ultrasonographic interpretation to the evaluation of clinical problems in large animal cases involving the upper limb, neck, back, pelvis, thorax and abdomen;
2. apply clinical reasoning skills and evidence-based medicine to appropriate application of diagnostic techniques as part of the overall investigation of a case;
3. critically appraise current diagnostic imaging techniques and reflect on personal development to improve technique;
4. critically appraise the literature relevant to clinical cases in the topics covered and how the literature can be used to inform practice.

Module Structure

The syllabus will be divided into 4 study units, each containing basic lecture and reading material supported by weekly interactions in the form of asynchronous case-based discussions, other discussions and/or synchronous journal clubs/literature critiques.

Study Unit 1 –The Neck

Radiography of the equine neck to include the following subject areas

Recognise and describe normal radiographic anatomy and its variation with breed and age (review form C-VDI.1)

Common abnormalities affecting the skeleton. Fractures, dislocations, congenital and developmental abnormalities. Degenerative conditions. Inflammatory and neoplastic changes.

The principles and problems associated with the use of contrast media to demonstrate lesions of the spinal cord.

Common radiographic abnormalities of the oesophagus. Obstructive lesions and functional disturbances. The significance of gas shadows.

The use of contrast media. Differential diagnoses.

Ultrasonography of the equine neck
Advanced imaging of the equine neck

Study Unit 2 – The Back and Pelvis

Radiography of the equine back and pelvis Recognise and describe normal radiographic anatomy and its variation with breed and age (review form C-VDI.1)

Common abnormalities affecting the skeleton. Fractures, dislocations, congenital and developmental abnormalities. Degenerative conditions. Inflammatory and neoplastic changes

Ultrasonography of the equine back and pelvis
Advanced imaging of the back and pelvis

Study Unit 3 – The Thorax and Abdomen

Radiography of the equine thorax and abdomen - Common abnormalities affecting the trachea, thoracic wall, pleural cavity, mediastinum, diaphragm and lungs. Pulmonary patterns. Differential diagnoses.

Ultrasonography of the equine thorax and abdomen - Echocardiography and thoracic ultrasound

Ultrasonography of the equine abdomen
Reproductive and urogenital ultrasonography

Study Unit 4 – The Upper Limb

Radiography of the upper limb (above the level of the carpus/tarsus)

Recognise and describe normal radiographic anatomy and its variation with breed and age (review form C-VDI.1)

Common abnormalities affecting bones and joints of the upper limb. Fractures, dislocations, inflammatory and degenerative conditions. Congenital and developmental abnormalities, metabolic disorders. Trauma. Differential diagnoses.

Ultrasonography of the upper limb including joints (shoulder /stifle) and soft tissue structures
Advanced imaging of the upper limb

Assessment Strategy

- **2 x 1500-word reflective case reports (60%)**
On a topic related to the relevant study units, students are required to reflect on their own practice, using evidence-based veterinary medicine to inform their reflection. Reflective case reports are written following the format of published case reports in the veterinary literature. The case report component of the assessment must be passed for successful completion of the module, and is non-compensatory with other assessments, however there is compensation between case reports. Case reports are also submitted to a discussion board for critique and discussion by/with peers. A proportion of marks for this assessment are also allocated to this discussion element.
- **1 x 1-hour open book examination (30%)**
Based around clinical scenarios/cases, relevant to the module study units.
- **1 x written journal critique (not more than 500 words) and group discussion (10%)**
Hosted by a staff member online synchronously using MS Teams. 2-4 students critique the same paper, and then discuss their critiques and any variations with the group, and the tutor and the students then hold a discussion of all papers. These are assessed on the submitted critique as well as the discussion.
- **1 x case log – 50 cases (pass/fail)**
The case log assessment is designed to assist the candidate in developing a solid foundation for everyday equine practice and demonstrate the necessary knowledge and skill base in the clinical setting.

Assessments are submitted sequentially with feedback being given between assessments to aid in the development of writing skills.

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.