

C-VDI.4 Large Animal Diagnostic Imaging (A)

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:

1. develop a logical, systematic and reasoned approach to large animal diagnostic imaging of the distal limbs and head as part of their overall investigation of a case in a practice environment;
2. 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. apply the principles of radiological and ultrasonographic interpretation to the evaluation of clinical problems in large animal cases involving the head or distal limb;
2. critically select and apply appropriate diagnostic techniques as part of the overall investigation of a case;
3. critically reflect on personal development of diagnostic imaging techniques ;
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 Equine Head

Recognition and description of normal radiographic anatomy - including age related variation (review from C –VDI.1)

Common abnormalities affecting the skull, jaw, sinus, nasal cavities, teeth, guttural pouch, hyoid apparatus, pharynx and larynx.

Advanced imaging of the equine head -ultrasonography, CT and MRI of the equine head

Study Unit 2 – The Foot and Pastern

Radiography of the equine foot and pastern to include the following subject areas:

Recognition and description of normal radiographic anatomy -including age related variation (review from C –VDI.1)

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

Familiarity with the general principles of contrast examinations and the performance and interpretation of the more commonly used techniques.

Ultrasonography of the equine pastern and foot. The principles of ultrasonography and, in particular, its application to soft tissue problems of the distal limb of the horse.

Advanced imaging of the equine foot and pastern - MRI and Scintigraphy of the equine foot and pastern (clinical applications)

Study Unit 3 – The fetlock and Metacarpus/tarsus

Radiography of the fetlock and Metacarpus/tarsus Recognition and description of normal radiographic anatomy - including age related variation (review from C –VDI.1)

Common abnormalities affecting bones and joints Fractures, dislocations, inflammatory and degenerative conditions. Congenital and developmental abnormalities, metabolic disorders. Trauma.

Differential diagnoses Familiarity with the general principles of contrast examinations (for example in cases of suspected joint sepsis)

Ultrasonography of the equine distal limb (excluding the pastern) The principles of ultrasonography and, in particular, its application to soft tissue problems of the distal limb of the horse.

Advanced imaging of the fetlock and Metacarpus/tarsus MRI and Scintigraphy of the equine fetlock and Metacarpus/tarsus (clinical applications)

Study Unit 4 – The carpus and tarsus

Radiography of the carpus and tarsus Recognition and description of normal radiographic anatomy - including age related variation (review from C –VDI.1)

Common abnormalities affecting bones and joints Fractures, dislocations, inflammatory and degenerative conditions. Congenital and developmental abnormalities, Trauma. Differential diagnoses

Familiarity with the general principles of contrast examinations (for example in cases of suspected joint sepsis)

Ultrasonography of the equine carpus and tarsus Advanced imaging of the carpus and tarsus MRI and Scintigraphy (clinical applications)

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.