

C-VC.2 Cardiovascular Diagnostics

Credits: 10 (100 hours)

Provider: Veterinary Postgraduate Unit – Institute of Veterinary Science

RCVS Content Covered

Module Content

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

- To select, appropriate diagnostic techniques for small or large animal patients based on their history and clinical findings (auscultation, physical examination).
- To be able to diagnose acute cardiac failure and shock
- To show an understanding of the balance between patient care and patient stabilisation before extensive diagnostic procedures are undertaken.
- To show competence in acquiring the appropriate diagnostic materials from the tests and procedures selected. Eg Electrocardiographs, radiographs and echocardiographs must all be of diagnostic quality and the scope of each examination sufficient to satisfy the diagnostic question being asked.
- To have the ability to critically assess and measure the diagnostic material once it has been derived
- To show competence in interpreting all of the diagnostic material that the candidate has acquired from each case and integrating all of the elements of their diagnostic work up to determine a final diagnosis.
- To provide an accurate diagnosis after their series of diagnostic tests have been completed.

Aim of the Module

The aim of this module is to:

1. increase the student's depth of knowledge and understanding of the diagnostic tools available in the investigation of disorders of the cardiovascular and respiratory systems of veterinary species;
2. develop the student's knowledge and understanding of how alterations in the results of diagnostic investigations allow a diagnosis to be reached.

Learning Outcomes

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

1. demonstrate in-depth understanding of the techniques involved in performing a thorough clinical examination of the cardiac patient;

2. demonstrate a thorough understanding of the various diagnostic options available for the evaluation of the cardiac patient and understanding of the limitations and applications of each;
3. demonstrate an understanding of the importance of performing each test according to standard protocols in order to safeguard the patient and make valid and repeatable conclusions;
4. demonstrate the ability to apply their knowledge in a logical and thorough diagnostic approach to investigation of clinical cases, integrating the results of diagnostic testing into case management;
5. appraise critically the literature relevant to clinical cases in the topics covered and discuss how the literature can be used to inform practice;
6. demonstrate the ability for critical reflection on the clinical work, including identifying potential clinical audit points translating to new protocols or measureable outcomes;
7. demonstrate the ability to recognise the appropriate case for onward referral.

Module Structure

The module will be divided into 4 study units:

Study Unit 1: This unit will cover clinical examination. The focus is on performing a thorough and logical examination, appreciating the range of normal across the veterinary species, identifying abnormalities and understanding the significance of changes.

Study Unit 2: This unit will cover electrocardiography and radiology. The focus is on acquiring accurate and repeatable images, interpretation of the results and application to a clinical patient as well as identifying artefacts and normal variations.

Study Unit 3: This unit will cover echocardiography and non-cardiac thoracic ultrasonography. The focus will be on acquiring and interpreting standard images, taking appropriate measurements, interpreting the findings and applying them to clinical cases.

Study Unit 4: This unit will cover ancillary testing for cardiorespiratory disorders. The focus will be on selecting appropriate diagnostic investigations and interpreting the results.

Assessment Strategy

Portfolio of cases (20 case log book), 3 x reflective case reports (1500 words each), 1 x short answer question and/or MCQ test 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.