

EQUINE MEDICINE

Course Organiser:	V Scott
Lecturers:	V Scott, A O'Connor, R Pilsworth, J Wood
Term	Michaelmas and Lent

Aims:

The content of this course complements and extends instruction provided in other courses related to health and disease in horses. It is designed to ensure that students have gained a level of academic competence which would allow them to begin the practice of clinical equine medicine.

Objectives:

At the end of the course the student should:

- possess the essential information on equine medical diseases on which to approach a diagnosis, based on history and clinical signs in an individual horse or, in cases of group problems, on epidemiological evidence;
- be able to select appropriate diagnostic tests and interpret the results;
- be able to devise appropriate forms of therapy or other action;
- give the appropriate prognosis.

Lecture List:

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| 1. Introduction & Common In-Practice Procedures | VS |
| An overview of the course.
Vaccination schedules, including Jockey Club rules, types of vaccine, advantages and disadvantages, different vaccine types, adverse reactions; pre-purchase examinations. | |
| 2–3. The High Risk Foal | VS |
| Indicators of the high risk foal, dysmaturity and prematurity, septicaemia, problems associated with asphyxia, abdominal pain, urogenital diseases, immunological disorders. | |
| 4. Dysphagia & Head Shaking | AO'C |
| Guttural pouch diseases (infection, mycosis, tympany); botulism; lead poisoning and other causes of pharyngeal paralysis; oesophageal obstruction. Head shaking. | |
| 5 –6. Respiratory Tract disease | VS |
| Upper Respiratory Tract: viruses, bacteria, investigation and diagnosis, sampling and laboratory tests and how to interpret the results, treatment, prevention and modes of transmission. | |

Lower Respiratory Tract: Chronic obstructive pulmonary disease, detailed aetiology, significance, investigation, diagnosis, therapy (including step approach) and prevention. Summer pasture associated obstructive pulmonary disease, pleuro-pneumonia, Rhodococcus, Dictyocaulus, Parascaris.

7–8. Colic – a diagnostic approach and decision making; Medical Colic VS

Diagnosis and case management decisions in equine colic. Conditions that resemble colic; non-gastrointestinal causes of medical colic; gastrointestinal causes of medical colic. Simple medical colics and their management: spasmodic colic, tympanic colic, colonic impactions. Complex medical colics: grass sickness and proximal enteritis.

Note that further lectures on surgical colics are given in the Equine Surgery course.

9. Acute Diarrhoea VS
Aetiology, clinical presentation, diagnosis and treatment of acute enterocolitis.

10. Weight loss VS

Work up and treatment of weight loss (with and without chronic diarrhoea; aetiology, clinical presentation, diagnosis and treatment of infiltrative bowel diseases etc) (parasitology covered in Lecture 9)

11. Clinical Parasitology VS
Parasitic diseases of the horse, diagnosis, treatment and worming programmes.

12. Liver Diseases VS
Pathogenesis, clinical signs, diagnosis and treatment of acute hepatic disease, ragwort poisoning, chronic hepatitis, and hyperlipaemia.

13. Urinary Tract Disease VS
Acute and chronic renal failure.

14–15. Skin Diseases RP
Pruritic and/or painful skin diseases. Non-pruritic and/or non-painful skin diseases.

16. Endocrine Disease VS
Pituitary adenoma. Metabolic syndrome.

17. Stiffness and Reluctance to Move VS
Myopathies: recurrent rhabdomyolysis, polysaccharide storage myopathies; atypical myoglobinuria; etc. Other causes: exhausted horse syndrome; tetanus; miscellaneous conditions. Narcolepsy.

Note: Laminitis is covered in the Orthopaedic Course.

Diagnostic Approach to Poor Performance – Handout.

Investigation including evaluation of respiratory, cardiovascular, musculoskeletal and neurological systems. Differential diagnoses.

18. Future Infectious Disease Risks

JW

EIA, AHS, WNV. Zoonoses.

Notes.

Aspects of cardiology in the horse are covered in the Cardiology Course (heart murmurs: auscultation, diagnosis, interpretation and clinical relevance. dysrhythmias: diagnosis, clinical relevance and treatment). Neurological and eye conditions are discussed in the Neurology and Ophthalmology Courses, respectively. Wound management is discussed in the Equine Surgery Course. Sedation, anaesthesia, epidurals etc are also covered in the Equine Surgery Course. Stud/reproductive medicine is covered in the Animal Breeding and Infertility and Obstetrics Courses. Equine Dentistry is covered in the Dentistry Course, and includes a practical (Easter term).

Practical Component:

In 5th year, students will rotate through the equine hospital where they have responsibility for administration of treatments. In addition, the 5th year Equine Studies Rotations (4 x half-day) include: 1 visit to World Horse Welfare Centre in Norfolk for clinical case work; a cardiology work-up session; a neurological work-up session; an orthopaedic examination practical. Students will also be taught reproductive clinical work, including rectal palpation, in the 5th year Gyneacology Rotation.

The equine rotations in 6th year consist of 1 block of 4 weeks in groups of 10-12 students. For each rotation, students work within the Referral Hospital and in the Ambulatory Practice covering all aspects of medicine (internal and reproductive), orthopaedics and surgery. Case based seminars will also be given in on a variety of topics. In addition, CAL will be made available for various topics throughout the 6th year.

Handouts are provided for every fifth year lecture during the Equine Medicine Course and during the sixth year rotations and seminars.

A handout on aspects of antimicrobial therapy and NSAID therapy will be given out during Lecture 1.

CAL/DVDs (in the Equine Hospital Reception):

- Diagnosis and management of lameness in the horse
- Foal in Mare: Insights inside the foaling mare
- Equine reproductive ultrasound
- Passing a nasogastric tube in the horse

- Return to soundness in acute pasture associated laminitis
- The art of equine auscultation: An interactive guide
- The Glass Horse: Elements of the distal limb
- The Glass Horse: Colic
- Upper Airway Disease (2 discs)

Further reading:

Textbooks

Beech (1991) Equine Respiratory Diseases. Lea & Febiger.

Bertone J (2006) Equine Geriatric Medicine & Surgery. Saunders, Elsevier.

Brown CM, Bertone JJ (2002) The 5-minute Veterinary Consult. Lippincott, Williams & Wilkins.

Colahan PT, Mayhew IG, Merritt AM, Moore JN (1999) Equine Medicine & Surgery. 5th Edition. Vol I & II. Mosby.

Higgins AJ, Snyder JR (2006) The Equine Manual. 2nd Edition. Saunders, Elsevier.

Kobluk, Ames and Geor (1995) The Horse: Disease and Clinical Management W B Saunders.

Lloyd DH, Littlewood JD, Craig JM, Thomsett LR (2003) Practical Equine Dermatology. Blackwell Publishing.

Mair TS, Divers TJ. (1997) Equine Internal Medicine. Self-Assessment Colour Review. Manson Publishing/The Veterinary Press.

Mair T, Lane S, Schumacher J, Watson E. (1998) Equine Medicine, Surgery & Reproduction. WB Saunders, London.

McGorum BC, Dixon PM, Robinson NE, Schmacher J. (2007) Equine Respiratory Medicine & Surgery. Saunders, Elsevier.

Patterson (1991) Equine Cardiology. Blackwell.

Pycock JF. (1997) Equine Reproduction & Stud Medicine. Self-Assessment Colour Review. Manson Publishing/The Veterinary Press.

Reed SM, Bayly WM, Sellon DC (2004) Equine Internal Medicine 2nd edition. WB. Saunders, Elsevier.

Reef VB (1998) Equine Diagnostic Ultrasound. WB Saunders, London.

Robinson . Current Therapy in Equine Medicine (Editions 1, 2, 3, 4 and 5). W

B Saunders.

Rose, R & Hodgson, D J (1993) Manual of Equine Practice. W B Saunders.

Savage CJ. (1999) Equine Medicine Secrets. Hanley & Belfus, Philadelphia.

Schumacher J, Mott HD (2006) A manual of Equine Diagnostic Procedures. Terton NewMedia, Jackson, WY, USA.

Scott DW, Miller WH Jr (2003) Equine Dermatology. Saunders, Elsevier.

Sellon DC, Long MT. (2007) Equine Infectious Diseases. Saunders, Elsevier.

Speirs (1997) Clinical Examination of Horses. W B Saunders.

Journals

Equine veterinary Education and Equine veterinary Journal

In Practice

AAEP

Specific references

Specific key references are given with each lecture during the Equine Medicine lecture course.