EQUINE SURGERY 2017-18

Course Organiser: K Smith
Lecturers: K Smith, J Brearley
Term: Michaelmas

Aims:

• To produce a graduate able to identify and manage the common surgical conditions in the horse;
• To be able to apply basic clinical and surgical principles to new situations using a logical problem-solving approach.

Objectives:

• To recognise and become familiar with common equine surgical conditions;
• To be able to apply anatomical, physiological, pathological and surgical principles to equine surgical conditions;
• To understand specific principles of equine surgery;
• To acquire the knowledge on how to choose, perform and interpret appropriate diagnostic tests to thoroughly investigate surgical conditions of the horse, and refer for specialist treatment when appropriate;
• To be able to plan an equine surgical procedure in its entirety with an understanding of advantages, disadvantages and associated risks;
• To learn how to apply principles to new situations using a problem-solving approach.

At the end of this course students should be familiar with the diagnosis and treatment of the more common equine surgical conditions.

Lecture list:

1. Introduction to Equine Surgery
   KS
2. Equine anaesthesia

3. Lacerations, Wound Healing and Basic Surgical Principles

4. Urogenital I: Castration & Complications

5. Urogenital II: Penis, Bladder, Ovaries & Neonatal Umbilicus
Anatomy of internal and external genitalia. Urolithiasis diagnosis and management. Surgical conditions of the penis. Surgical conditions of ovaries, vulva and vestibule. Conditions and surgical management of the neonatal umbilicus, bladder rupture and umbilical herniorrhaphy.

6. Colic Surgery: Common Lesions, Surgical Techniques and Post-Operative Complications
Main causes of GI compromise that require surgery; strangulating, non-strangulating and simple obstructive lesions. Exploratory laparotomy. Complications of colic surgery.

7. Upper Respiratory Tract I: Pharynx & Larynx

8. Upper Respiratory Tract II: Nasal Passages, Sinuses and Guttural Pouch
9. Miscellaneous: Oesophageal obstruction, rectal tears, enucleation and euthanasia  
How to assess and give first aid to a horse with a suspected oesophageal obstruction. Clinical signs and management of iatrogenic rectal tears, enucleation techniques, and management of equine euthanasia.

10. Equine fluid therapy, circulatory shock & endotoxaemia  
Review of why acute patients have depleted circulating volume and an approach to delivery of IV and enteral fluid therapy. Review of endotoxaemia in horses, how it is recognised and strategies for management.

**Practical Component:**
In addition to the lecture course in equine studies, students in fifth year rotate through the equine hospital where they have responsibility for administration of treatments. The 5th Year equine studies rotations (3 x half–day rotations) include an orthopaedic examination session and a cardiology session. Students will also have the opportunity to be exposed to a practical transrectal palpation session.

The final year Equine Rotation consists of 4 weeks split into 2 weeks within the hospital and 2 weeks in the first opinion ambulatory practice. We aim to cover a broad spectrum of cases in horses presenting with medical, orthopaedic and surgical problems. Practical teaching will include one afternoon of diagnostic nerve blocks and anatomy tutorial using cadaver distal limbs.

**Further Reading:**