

Guidelines for the Equine Clinical Practice, 11th semester

Duration of the practical is elected by the students: either 4 or 8 weeks, 40 working hours per week. The aim of the practical is to widen the students' theoretical and practical knowledge. The schedule will be made by an appointed clinician on the first day of the practical.

Basic tasks include active participation in clinical examinations, evaluation of clinical and laboratory findings, treatments, and communication with owners.

Equine internal medicine

Examination and treatment of abdominal diseases

- Physical examination and monitoring of the colic horse, rectal examination, nasogastric intubation, abdominal ultrasonography, abdominocentesis.
- Medical therapy of colic diseases, intensive postoperative treatment of surgical colic cases.
- Gastroscopy, treatment of gastric ulceration.
- Diagnosis and therapy of acute and chronic enteritis, oral glucose tolerance test.
- Ultrasonography of the liver, kidney and spleen, endoscopy of the urinary tract, urinary catheterisation, clinical pathology of liver and kidney diseases.

Examination and treatment of respiratory diseases

- Physical examination, ultrasonography, radiography, resting and dynamic endoscopy of the airways, tracheal wash, bronchoalveolar lavage, thoracocentesis, arterial blood gas analysis.
- Diagnosis of common upper airway disorders (recurrent laryngeal neuropathy, dorsal displacement of the soft palate, pharyngeal lymphoid hyperplasia).
- Diagnosis and treatment of guttural pouch diseases (mycosis, tympany, empyema).
- Diagnosis and treatment of lower airway diseases (equine asthma, pleuropneumonia, bronchopneumonia).

Examination and treatment of cardiovascular diseases

- Physical examination of the cardiovascular system, electrocardiography, evaluation of electrocardiograms, echocardiography, ultrasonography of the jugular vein.
- Diagnosis and therapy of disseminated intravascular coagulopathy and thrombophlebitis.

Examination and treatment of neurological diseases

- Physical examination of the neurological system.
- Atlantooccipital and lumbosacral puncture.
- Radiography of the skull and the neck.
- Laboratory examination of the cerebrospinal fluid.
- Therapy of encephalitis and myelitis/myelopathy.

Examination and treatment of skin diseases

- Physical examination of the skin, skin scraping, skin biopsy.
- Diagnosis and treatment of dermatitis and common skin tumours (sarcoïd, melanoma, papilloma).

Examination of the genital tract in mares and stallions

- Physical and ultrasonographic examination of the genital tract, breeding soundness examination.

Evaluation of laboratory results

- Besides the above-mentioned tests, evaluation of haematology, clinical chemistry, parasitology and cytology results.

Surgery

Anaesthesiology

- Preanaesthetic monitoring, insertion and fixation of intravenous catheters, perioperative analgesia.
- Intravenous and inhalation narcosis techniques, (premedication, induction, maintenance).
- ASA anaesthesiology protocols, protocols of emergency anaesthesia.

Basic ancillary diagnostic methods

- **Radiology**

- Radiation safety
- Taking and interpreting radiographs, especially those of the podotrochlear region, pastern, fetlock, carpus, hock and stifle.

- **Ultrasonography**

- Ultrasonography of the limbs, ultrasonographic anatomy of the limbs distal to the carpus and hock.

Lameness examination

- Participation in lameness examinations, knowledge and execution of standard protocols.
- Participation in diagnostic analgesia, execution of perineural and intrasynovial anaesthetic techniques.
- Basic knowledge of further axillary diagnostic aids (CT, MRI, scintigraphy).

Wound management

- Examination and treatment of the injured horse.
- Special considerations with different wounds (intrasynovial injuries, fractures).
- Methods of haemostasis.
- Wound toilette, wound dressings.
- Treatment of exuberant granulation tissue.
- Types of bandages (pressure bandage, supporting bandage, Robert Jones bandage).
- Bandaging techniques of the carpus and hock.
- Foot cast, slipper cast, half limb cast, full limb cast.

Knowledge of surgical instruments and suture materials

- Instruments of the basic surgical kit (scalpels, scissors, haemostats, forceps and castration instruments).
- Absorbable and non-absorbable suture materials.
- Suture techniques (different continuous and interrupted suturing techniques).

Ophthalmology

- The steps of the ophthalmological examination.
- Examination and treatment of eyelid injuries.
- Injuries and diseases of the cornea, differential diagnostics and therapy.
- Diagnosis and treatment of uveitis.

Dentistry

Examination of the oral cavity and the teeth.

Correction of dental abnormalities.

Tooth extraction in standing position.

Participating, assisting in different equine surgeries

- Umbilical hernia.
- Colic surgery.
- Castration, cryptorchidectomy.
- Upper respiratory tract surgery (laryngoplasty, ventriculo-chordectomy, laser surgery).
- Arthroscopy, laparoscopy.
- Fracture repair.

Expected competencies at the end of the practical

The students must be capable to carry out the following tasks:

1. Performing a detailed physical examination (including neurological examination), and interpretation of the findings.
2. Examination and monitoring of the colic horse.
3. Oral drug administration, subcutaneous, intramuscular and intravenous injections.
4. Insertion and suturing of intravenous catheters.
5. Performing lameness examinations including provocation tests, diagnostic analgesia, basic radiography and ultrasonography.
6. Examination of the injured horse, decision-making (conservative therapy, surgery).
7. Performing ophthalmological examinations.
8. Examination of the oral cavity and the teeth, correction of common dental abnormalities.
9. Scrubbing in for surgeries.
10. Participation during castration, colic surgery and arthroscopy.
11. Applying different types of bandages.