# The Equine Hospital Manual

Kevin Corley, Jennifer Stephen

## 1. Procedures In the Adult Horse.

1.1 – Endotracheal Intubation.

Kevin Corley.

1.2 - Cardiopulmonary Resuscitation.

Kevin Corley.

1.3 - Physical Examination.

Anna Hammond.

1.4 – Examination Per Rectum.

Emma Rowe.

1.5 - Collection Of Blood Samples and Intravenous Injection.

Kevin Corley.

1.6 – Intramuscular Injections.

Jennifer Stephen.

1.7 – Passage of A Nasogastric Tube and Indwelling Nasogastric Tube.

Bettina Dunkel.

1.8 – Abdominocentesis.

Jennifer Stephen.

1.9 - Peritoneal Lavage.

Emma Rowe.

1.10 - Gastroscopy.

Tim Brazil.

1.11 - Percutaneous Trocharisation.

Emma Rowe.

1.12 - Rectal Mucosal Biopsy.

Anna Hammond.

1.13 - Liver Biopsy.

Kevin Corley.

1.14 – Jugular Catheterisation.

Kevin Corley of the Cephalic and Lateral Thoracic Veins.

Kevin Corley.

1.16 – Fluid Administration Sets.

Kevin Corley.

1.17 – Electronic Infusion Pumps and Syringe Drivers.

Kevin Corley.

1.18 - Blood and Plasma Transfusion.

Anna Hammond.

1.19 - Collection of Arterial Blood Gas Samples.

Harold Mckenzie.

1.20 - Arterial Catheterisation.

Harold Mckenzie.

1.21 - Indirect Arterial Blood Pressure Measurement.

Kevin Corley.

1.22 – Direct Arterial Blood Pressure Measurement.

Kevin Corley.

1.23 - Central Venous Pressure Measurement.

Mary Durando.

1.24 - Electrocardiography.

Mary Durando.

1.25 – Echocardiography.

Mary Durando.

1.26 - Cardiac Output Measurement.

Mary Durando.

1.27 – Pericardiocentesis.

Mary Durando.

1.28 - Emergency Tracheotomy.

Jennifer Stephen.

1.29 - Intra-Nasal Oxygen Administration.

Harold Mckenzie.

1.30 - Nebulisation.

Harold Mckenzie.

1.31 - Endoscopy Of The Respiratory Tract.

Jennifer Stephen.

1.32 - Endoscopy Of The Guttural Pouch.

Harold Mckenzie.

1.33 - Tracheal Aspiration.

Harold Mckenzie.

1.34 - Bronchoalveolar Lavage.

Harold Mckenzie.

1.35 – Pleurocentesis.

Harold Mckenzie.

1.36 - Evacuation Of Pneumothorax.

Harold Mckenzie.

1.37 – Lung Biopsy.

Harold Mckenzie.

1.38 – Sinocentesis.

Jennifer Stephen.

1.39 - Lumbosacral Spinal Fluid Collection.

Martin Furr.

1.40 - Atlanto-Occipital Cerebrospinal Fluid Collection.

Martin Furr.

1.41 – Epidural Injection And Catheterisation.

Lydia Donaldson.

1.42 - Urinary Catheterisation.

Anna Hollis.

1.43 - Endoscopy Of The Bladder And Ureters.

Anna Hollis.

1.44 – Endometrial Biopsy.

Anna Hollis.

1.45 - Uterine Lavage.

Anna Hollis.

1.46 – Renal Biopsy.

Anna Hollis.

1.47 – Bone Marrow Biopsy.

Roger Smith.

1.48 – Regional Anaesthesia of the Eye.

Mary Utter.

1.49 – Placement of A Sub-Palpebral Lavage Catheter.

Mary Utter.

1.50 – Regional Analgesia of the Limb.

Jennifer Stephen.

1.51 – Bandaging of the Limb.

Louise Southwood.

1.52 - Application of Splints.

Jennifer Stephen.

1.53 – Application of a Tourniquet and Regional Limb Perfusion.

Jennifer Stephen.

1.54 - Bandaging of the Head.

Louise Southwood.

1.55 – Muscle Biopsy.

Nicola Menzies-Gow.

1.56 – Suture Materials and Suture Patterns for Skin Closure.

Jennifer Stephen.

## 2. Procedures in the Neonatal Foal.

Kevin Corley.

- 2.1 Nasotracheal and Orotracheal Intubation.
- 2.2 Cardiopulmonary Resuscitation.
- 2.3 Mechanical Ventilation.
- 2.4 Restraint of the Neonatal Foal.
- 2.5 Placing an Indwelling Nasogastric Tube.
- 2.6 Jugular Vein Catheterisation.
- 2.7 Indirect Blood Pressure Measurement.
- 2.8 Collection of Arterial Blood Gas / Arterial Catheterisation.
- 2.9 Placement of a Urinary Catheter.
- 2.10 Ultrasonography of the Umbilicus.

#### 3. Hospital Design and Organisation.

3.1 – Designing and Building an Equine Hospital.

Tim Greet.

3.2 - Diagnostic Imaging.

Renate Weller, Fiona Ripley, Nick Bolas and Jennifer Stephen.

3.3 – Biosecurity for Equine Hospitals: Protecting the Patient and the Hospital.

Helen Wheeler Aceto and Barbara Dallap Schaer.

3.4 - Hospital Forms.

Veronica Roberts.

#### 4. Anaesthesia.

Lydia Donaldson.

- 4.1 General Anaesthesia.
- 4.2 Anaesthesia for some Specific Situations.
- 4.3 Total Intravenous Anaesthesia (Tiva).
- 4.4 Standing Surgery Sedation and Anaesthesia.
- 4.5 Post-Anaesthetic Morbidity.

# 5. Nutritional Management of the Hospitalised Horse.

Meri Stratton-Phelps.

5.1 - The Adult Horse.

5.2 – Nutrition Management of the Hospitalised Foal.

#### 6. Common Treatments.

6.1 – Standing Sedation.

Lydia Donaldson.

6.2 - Pain Management in the Hospitalised Horse.

Lydia Donaldson.

6.3 – Antimicrobial Therapy.

Steeve Giguère.

6.4 - Aerosolised Antimicrobials.

Harold Mckenzie.

6.5 - Fluid Therapy.

Kevin Corley.

## 7. Common Problems Encountered in the Hospitalised Horse.

7.1 – Unexplained Fever.

Veronica Roberts And Shaun Mckane.

7.2 - Thrombophlebitis.

Harold Mckenzie.

7.3 – Inappetence.

Bettina Dunkel.

7.4 – Unwillingness To Drink.

Harold Mckenzie.

7.5 – Hyperlipaemia.

Bettina Dunkel.

# 8. Monitoring and Treating the Coagulation System.

8.1 – Monitoring the Coagulation System.

Luis Monreal.

8.2 – Management of Horses With Coagulopathies.

Luis Monreal And Escolástico Aguilera.

#### 9. Monitoring and Treating the Cardiovascular System.

9.1 – Monitoring the Cardiovascular System.

Mary Durando and Kevin Corley.

9.2 – Treating the Cardiovascular System.

Mary Durando and Kevin Corley.

## 10. Monitoring and Treating the Respiratory System.

Harold Mckenzie.

10.1 – Monitoring the Respiratory System.

10.2 - Management of Horses with Respiratory Disorders.

## 11. Monitoring and Treating the Gastrointestinal System.

11.1 – Monitoring the Gastrointestinal System.

Emma Rowe, Jennifer Stephen, Kevin Corley and Tim Brazil.

11.2 – Management of Horses with Gastrointestinal Disorders.

Emma Rowe.

## 12. Monitoring and Treating the Liver.

Andy Durham.

- 12.1 Monitoring the Hepatic System.
- 12.2 Management of Horses with Hepatic Disorders.

#### 13. Monitoring and Treating the Urogenital System.

Anna Hollis and Kevin Corley.

13.1 – Monitoring the Urogenital System.

13.2 – Treating the Urogenital System.

#### 14. Monitoring and Treating the Neurological System.

Martin Furr.

14.1 – Monitoring the Neurological System.

14.2 - Management of Horses with Neurologic Disorders.

## 15. Monitoring and Treating Common Musculoskeletal Problems in Hospitalised Horses.

15.1 – Monitoring the Musculoskeletal System.

Louise Southwood.

15.2 - Laminitis.

15.2.1 - Detection And Treatment of Laminitis.

Louise Southwood.

15.2.2 – Supporting the Laminitic Foot.

Nicola Menzies-Gow.

15.3 – Biochemical Monitoring Of the Muscles.

Nicola Menzies-Gow.

15.4. Management Of Rhabdomyolysis And Myopathy.

Nicola Menzies-Gow.

15.5 – Monitoring Horses with Implants.

Louise Southwood.

15.6 - Monitoring Surgical Incisions.

Ehud Eliashar.

15.7 - Ultrasonography of Surgical Incisions.

Ehud Eliashar.

15.8 - Management of Surgical Site Infections.

Louise Southwood.

15.9 - External Coaptation (Splinting).

Jennifer Stephen.

15.10 - Application of Casts.

Ehud Eliashar.

## 16. Management of Horses with Problems of the Integument.

16.1 – Wound Management in Hospitalised Horses.

Louise Southwood.

16.2 - Simple Skin Grafting Techniques.

Jennifer Stephen.

# 17. Monitoring and Treatment of Eyes.

Mary Utter.

17.1 – Ophthalmic Examination.

17.2 – Management of Horses with Specific Ophthalmic Conditions.

17.3 – Management of Ocular Problems in the Neonatal Foal.

#### 18. Physiotherapy.

Bairbre Sharkey and Patrick Herbots.

18.1 - Introduction.

18.2 – Indications for Physiotherapy.

18.3 - Treatment Techniques.

18.4 - Conclusion.

## 19. Appendices.

19.1 - Drug Doses.

19.2 – Normal Physiological Values.

19.3 – Anticoagulants Needed for Various Blood Tests.

19.4 - Haematology.

19.5 - Biochemistry and Electrolytes.

19.6 – Blood Gas Analysis.

19.7 - Peritoneal Fluid Analysis.

19.8 - Transtracheal and Bronchoalveolar Fluid Analysis.

Harold Mckenzie.

19.9 - Normal Values for Pleural Fluid.

19.10 – Normal Values for Cerebrospinal Fluid.

Martin Furr.

19.11 – Normal Values for Urine and Urine Production.

19.12 - Normal and Abnormal Values for Joint Fluid.

19.13 – Normal Haemodynamics of Adults and Foals.

19.14 – Diagnosis of Pituitary Pars Intermedia Dysfunction (Cushing's Disease).

Jocelyn Habershon-Butcher. 19.15 – The Oral Glucose Tolerance Test. Jocelyn Habershon-Butcher. 19.16 – Ageing Horses by Dentition. Inside Back Cover: CPR Of The Neonatal Foal