

ESVPS

GENERAL PRACTITIONER CERTIFICATE IN EMERGENCY MEDICINE AND SURGERY – GPCert(EM&S)

SYLLABUS

This syllabus is intended to guide the delegate to the key areas they are expected to understand. The emphasis is very much on the approach to different situations – appropriate triage, basic and advanced life support, use of appropriate diagnostic procedures and a rational approach to determining the required intervention.

The veterinarian will be expected to have knowledge of common disorders and an appreciation of resource material from where further research can be undertaken into more unusual conditions. Suitable reading lists and resource material will be provided, both in this Handbook, and by individual tutors during the course.

Administrative, Legal, and Ethical Issues in the Critically Ill

The economics of emergency veterinary practice

ICU admission procedures including “Advanced Directives” e.g. Do-Not-Resuscitate requests

Discussing prognosis with the owner

Clinical records

The Medicines Act

Misuse of Drugs Act

Health and Safety at Work Act

Control of Substances Hazardous to Health Regulations

Support of the Recumbent Patient, Monitoring and Pharmacology

Techniques for monitoring organ function; including:

ESVPS

- Clinical examination
- Arterial blood pressure
- Pulse oximetry
- Capnography
- Urinary output
- Blood gas analysis

Maintenance and monitoring of body temperature

Monitoring mental status

Care of the bladder, colon, mouth and eyes in the recumbent patient

Use of physiotherapy

Techniques for long-term supply of oxygen therapy

Kirby's Rule-of-Twenty

Nasocomial Infection in the ICU

An understanding of the pharmacokinetics, potential interactions and adverse effects of common therapeutics agents (including anaesthetics, anti-inflammatories, analgesics, antimicrobials and anti-parasitics)

Use of sedatives, analgesics and neuromuscular blockers

The delegate is expected to be familiar with the indications, advantages and disadvantages for the following procedures; however, further detailed knowledge is not required:

Long-term mechanical ventilation, electrical defibrillation, cardiac pacing, magnetic resonance imaging, intracranial pressure monitoring, pulmonary artery and pulmonary capillary wedge pressure monitoring

Laboratory Diagnosis and Clinical Pathology

Sampling techniques, sample processing, storage and recording of data

Use of a microscope to examine blood smears, urinary sediment and basic cytology

Assessment of haemostasis

ESVPS

Interpretation of clinical laboratory medicine information, including: haematology, biochemistry, electrolyte and blood gas analysis

The Initial Approach to the Emergency Patient

Priorities in emergency cases; triage systems and patient assessment

Emergency vascular access techniques

Pain management

Patient stabilisation and monitoring

Zoonosis, health and safety concerns and precautions

Infectious diseases and preventative healthcare

Cardiopulmonary-Cerebral Resuscitation (CPCR)

Predisposing factors

Determining prognosis and recommendations

Treatment

Fluid Therapy

Fluid and electrolyte therapy

Intravenous catheter placement and maintenance

Advanced techniques for obtaining vascular access:

Seldinger's, over-the-needle and through-the needle techniques

Intraosseous infusion techniques

Central venous pressure monitoring

Haematological Emergencies and Transfusion Medicine

The transfusion trigger

ESVPS

Selection of appropriate blood products
Protocols to minimise adverse outcomes
Management of common conditions

Nutrition in Critically Ill Animals

Acute malnutrition
Procedures for providing Enteral Nutrition (EN), Total Parenteral Nutrition (TPN) and Partial Parenteral Nutrition (PPN)

Imaging Techniques

Radiology of the critically ill patient
Echocardiography
Abdominal sonography

Anaesthesia, Analgesia and Sedation Techniques

Patient stabilisation prior to anaesthesia
Parenteral and inhalational anaesthetic regimes
Anaesthetic equipment and monitoring techniques
NSAIDs, opioids, local anesthetic and topical treatment options

Principles of Surgery

Stabilizing the patient prior to surgery
Surgical planning and crisis management
Indications for immediate surgical intervention
Surgical asepsis and theatre protocol
Rational antibiotic use in surgical patients

ESVPS

Trauma and Wound Management

Emphasis is placed on the acute management of these injuries rather than potential treatment options

- Haemostasis
- Abdominal trauma
- Brain and/or spinal Injury
- Respiratory injury
- External soft tissue wounds
- Myocardial injury
- Musculoskeletal trauma

Shock

Assessment, diagnosis and treatment

Gastrointestinal Emergencies

Common emergency conditions affecting the oesophagus, stomach, small, large intestine, liver and pancreas; especially the approach to the “acute abdomen”

Diagnosis and monitoring procedures

Surgical intervention

Reproductive and Paediatric Emergencies

Normal reproductive physiology and function

Clinical signs and diagnosis

Management of common conditions

Renal and Urinary Tract Emergencies

Diagnostic techniques, including laboratory investigation of renal disease

ESVPS

Investigation and management of common presentations

Principles of renal, ureteral, bladder and urethral surgery

Cystocentesis; placing and maintenance of urinary catheters

Cardiovascular Emergencies

Physical examination and diagnostic techniques (including auscultation, ECG, radiography, echocardiography and laboratory tests)

Therapeutics and management of cardiac failure

Pericardiocentesis

Respiratory Tract Emergencies

Diagnostic techniques for respiratory disease (including auscultation, radiography, endoscopy and arterial blood gas analysis)

Methods of oxygen delivery

Techniques for drainage of the pleural cavity

Neurological Emergencies

Performing a neurological examination

Diagnostic tests and their application

Management of common conditions

Fundamentals of neurosurgery

Ophthalmological Emergencies

Practical examination techniques

Recognition of normal features and variants

Diagnostic approach to common presentations, such as the red eye, ocular pain, ocular

ESVPS

discharge and blindness

Medical and surgical management of common ocular conditions, including corneal ulceration, uveitis and glaucoma

Ocular manifestations of systemic disease

Current ocular therapeutics

Dermatological Emergencies

Clinical signs and emergency management of common conditions (cellulites, pruritus, autoimmune conditions and allergic disease)

Dermatological manifestations of systemic disease

Endocrine and Metabolic Emergencies

Diagnosis and management of common diseases, including hypoadrenocorticism and diabetes mellitus

Understanding of key diagnostic tests and their application

Complications encountered during therapy, their prevention and management

Toxicologic Emergencies

Common poisonings from insecticides, molluscicides, rodenticides, herbicides, household preparations, plants

Diagnosis, therapeutics and prognosis of common presentations

Rabbit, Rodents and Cage Birds

Common emergency conditions, anaesthesia and analgesia