

Essentials of Anaesthesia Mini Series

Session Three: Analgesia and Monitoring Anaesthesia - Case Based Discussions

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Session 3

Analgesia and monitoring anaesthesia- case based discussions

In this final session of the series we will use clinical cases to discuss the best use of analgesic techniques and anaesthesia monitoring to ensure the best outcome. Different drugs and analgesic techniques will be discussed, tailor made to each particular case, highlighting those most suited to a specific situation. The techniques discussed will include, but not be limited to different classes of analgesics and continuous infusions. For each case discussed, we will also use the different monitoring modalities available to emphasise those that will provide the most valuable information and ensure safe anaesthesia.

Learning objectives

- Delegates will learn how to select the most appropriate analgesic plan for the cases discussed, dependent on both the patient and the planned procedure
- Delegates will be able to see how continuous infusions may be utilised to improve analgesia provision, reduce inhalational anaesthetic requirements, improve stability of anaesthesia and ensure monitoring is optimized
- Monitoring equipment available in practice will be discussed, reviewing how the most information can be obtained to ensure best anaesthesia

Monitoring anaesthesia

- · Principles of monitoring
- Basic principles of each technique
- Troubleshooting problems
- Common interventions
- Techniques
 - o Blood pressure monitoring
 - Capnography
 - Pulse oximetry
 - o ECG

Case based studies

- Congestive heart failure (CHF)
 - Patient stabilisation
 - o Considerations for anaesthesia
- Mitral valve degenerative disease
- 5yo MN CKCS with 3/6 left sided systolic murmur confirmed as MVD stage B2 (LA enlargement) presented for intradermal allergy testing
 - o Considerations for anaesthesia
 - o Pre-anaesthesia diagnostics
 - Protocol selection
 - Vasopressor intervention
- Lower urinary tract obstruction
- 3yo MN DSH
- 48-hour history of dysuria, abdominal pain
- Previous episode of FLUTD 1 year ago, resolved with conservative management
 - Pre-anaesthesia considerations
 - Analgesia
 - Fluid therapy
 - Blood work
 - Essential diagnostics
 - Stabilisation

- Anaesthesia considerations
 - Blood pressure monitoring
 - Intervention
 - Analgesia
- · Gastric dilation & volvulus
- 7yo MN GSD
- Presents at 8pm with a history of retching, abdominal bloating and distress
 - Patient stabilisation
 - Blood work
 - IV access
 - Fluid therapy
 - Analgesia
 - Adjunct therapy
 - Assessing response
 - Anaesthetic considerations
 - o Planning anaesthesia
 - Intra-operative analgesia
 - Continuous infusions
 - o Common intra-operative problems
- Caesarean section
- 3yo FE Labrador Retriever
- 6-hour history of dystocia
 - o Analgesia provision
 - Legislation and drug licensing
 - o Risk factors and considerations for anaesthesia
 - Monitoring during anaesthesia
 - Neonate resuscitation
- Brachycephalic (BOAS)
- 2yo FN English Bulldog
- Reported to be healthy
- Mild-moderate respiratory noise
- Anaesthesia for surgical repair of lower lid entropion
 - o Considerations for anaesthesia
 - Premedication
 - Patient monitoring
 - Analgesia
 - Risk factors and minimising risk
 - Essential steps
 - Recovery from anaesthesia
 - Nebulisation and decongestant therapy
- Geriatric cat
- 14yo FN DSH hyperthyroid, G3/6 left sided systolic murmur, on thiamazole BID, fractious
 - o Concurrent disease status
 - o Age and temperament related factors
 - o Pre-anaesthesia diagnostics
 - o Considerations for anaesthesia
- Aggressive dog
- 5yo GSD M presented for skin mass removal from hind limb
 - o Patient history & limited clinical examination
 - Risk factors
 - Considerations for sedation and analgesia with limited information
 - Complications associated with sedation of aggressive patients

- Pleural space disease
- 1yo MN DSH
- Missing for 3 days
- Returned with tachypnoea, intermittent open mouth breathing, inappetance
- Dog sitting position
- Difficult to examine (not normal behaviour)
 - o Pre-anaesthesia stabilisation
 - o Preparation for anaesthesia
 - o Induction protocol
 - o Monitoring during anaesthesia
 - o Recovery
- Paediatrics
- 12wo WHWT F with a suspected PSS for abdominal imaging
 - Considerations for anaesthesia
 - Hepatic dysfunction
 - Body temperature regulation
 - Blood glucose regulation
 - Heart rate
 - Feeding