

Lecture summaries

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The Delicate Balance: Neonatal Anaesthesia Demystified

Neonatal patients in the emergency and critical care setting pose significant anaesthetic challenges, with limited physiological reserves and rapid decompensation when things go wrong. This lecture will explore the unique physiological considerations of neonatal patients undergoing anaesthesia in ECC. Through a systematic 'check-list', attendees will learn how to make safe anaesthetic nursing choices in high-risk neonatal emergencies, anticipate complications, and implement strategies to maintain stability and improve outcomes in the neonate.

Learning goals

1. Recognise the key physiological differences in neonatal patients that impact anaesthetic management in the ECC setting
2. Identify common risks and complications associated with neonatal anaesthesia during emergency procedures
3. Apply practical strategies to support the neonate undergoing anaesthesia in the ECC setting
4. Anticipate and respond to anaesthetic changes to improve patient safety and outcomes

Anaesthetic Case Studies

Anaesthetic management relies heavily on the vigilance and clinical judgement of the veterinary nurse, contingent on their underpinning knowledge. This highly interactive session will use anaesthetic case studies to place the nurse at the centre of anaesthetic planning, monitoring, and intervention. Through guided discussion and audience participation, attendees will work through case progression, recognise early signs of instability, and explore nursing-led strategies to prevent and manage complications. The session is designed to build confidence, promote critical thinking, and empower veterinary nurses to take an active, pivotal role in anaesthetic patient care.

Learning goals

1. Apply structured anaesthetic decision-making to a range of clinical and emergency case scenarios
2. Identify common anaesthetic challenges and complications using case studies
3. Interpret patient assessment and monitoring data to guide anaesthetic adjustments
4. Develop practical, adaptable anaesthetic plans tailored to individual patient risk
5. Reflect on outcomes to improve future anaesthetic management and patient safety

Acid Base

This session will break down the principles of acid–base balance, exploring the body's buffering systems and how derangements present clinically in our emergency and critical care patients. Core concepts underpinning venous blood gas interpretation will be introduced to attendees, building confidence through practical tips and case-based examples. By the end of the lecture, attendees will be able to interpret blood gas results more effectively and understand the systems behind the numbers and how these manifest in the patient.

Learning goals

1. Understand what pH represents and why it is clinically relevant in emergency and critical care patients
2. Describe the body's buffer systems and the role of the Henderson Hasselbalch equation in acid–base balance
3. Review the principles of strong ion theory and its relevance to blood gas interpretation
4. Recognise and assess appropriate acid–base compensation patterns