Lecture summaries

Claire Sharp

BSc BVMS(Hons) MS DipACVECC
Associate Professor in Emergency and Critical Care
School of Veterinary Medicine, Murdoch University, Murdoch, Australia

Uncontrolled haemorrhagic shock: Practicalities of massive transfusion

Co-presenter with Corrin Boyd

Haemorrhagic shock results in life-threatening defects in tissue oxygenation due to loss of both intravascular volume and haemoglobin. Management requires both definitive control of haemorrhage and replacement of the lost volume and haemoglobin. This is complicated by coagulopathy, ongoing haemorrhage, and worsening impairment of perfusion. This session focusses on recognizing patients with severe uncontrolled haemorrhage that are at immediate risk of death to allow aggressive and timely intervention. Massive transfusion for uncontrolled haemorrhagic shock often includes combinations of blood products. Transfusion reactions should be expected. Antifibrinolytics are generally used concurrently, and serial viscoelastic testing can help guide therapy.

Learning goals

1. Understand the pathophysiology of haemorrhagic shock
2. Describe how to perform massive transfusion
3. Understand complications of massive transfusion
4. Understand appropriate diagnostic tests to perform during haemorrhagic shock

Challenging shock cases: Case based

Co-presenter with Corrin Boyd

This case-based presentation covers the speakers' approach to challenging cases with shock of varying mechanisms in critically ill patients. Hypovolaemia, vasodilation, and the interaction between the two will be a focus. The cases will be linked back to shock pathophysiology by discussion of the 'tree of life' of factors that affect tissue perfusion. The presentation will cover an approach to shock that can be broadly applied to other clinical scenarios.

Learning goals

1. Understand interacting mechanisms of shock in clinical cases
2. Describe a rational approach to the clinical recognition of shock
3. Prescribe appropriate shock treatments

GI Prokinetics in the ICU: Does erythromycin beat metoclopramide?

Co-presenter with Corrin Boyd

Gastrointestinal (GI) dysmotility is common in ICU-hospitalised dogs and cats, with consequences including vomiting and regurgitation, failure to meet targeted caloric intake, and aspiration pneumonia. Medications with a GI prokinetic effect, including metoclopramide and erythromycin, are often prescribed for these patients. This session reviews the current literature for the benefits and risks associated with GI prokinetic therapy in the ICU. Focus will be given to

the question of whether prokinetic use of erythromycin contributes to the development of antimicrobial resistance. Case examples will be used to highlight clinical decision making.

Learning goals

1. Understand the mechanisms of action of metoclopramide and erythromycin
2. Describe clinical evidence for the use of prokinetics in human and veterinary critical care
3. Understand adverse effects of prokinetics
4. Prescribe rational treatment plans for ICU cases with GI dysmotility