

Triage STAT: Emergency Approach to the Small Animal Trauma Patient

Elisa M. Mazzaferro, MS, DVM, PhD, DACVECC describes her diagnostic and therapeutic approach to the small animal trauma patient, including management of respiratory injuries, rib fractures, pneumothorax, and uroabdomen.

Speaker Bio:

Dr. Elisa Mazzaferro is a Staff Criticalist at Cornell University Veterinary Specialists in Stamford, CT and an Adjunct Associate Clinical Professor of Emergency and Critical Care at Cornell University College of Veterinary Medicine. She is a 1997 graduate of Michigan State University College of Veterinary Medicine. She completed a four-year combined Emergency and Critical Care Residency and PhD in Small Animal Clinical Sciences at Colorado State University and became board-certified by the American College of Veterinary Emergency and Critical Care (ACVECC) in 2002. She is a Past-President of ACVECC and is the current President of the Veterinary Emergency and Critical Care Society. In 2018, she was the recipient of the VECCS Ira Zaslow Distinguished Service Award. Dr. Mazzaferro has given presentations in more than 10 countries and 21 States within the U.S. and has published 4 books, as well as numerous manuscripts and book chapters topics related to Small Animal Emergency and Critical Care. In her spare time, she enjoys gardening and relaxing with her 3 dogs and cat.

Learning Objectives:

1. Identify sources and clinical signs of hypovolemic shock.
2. Treat hypovolemic/hemorrhagic shock with crystalloid, colloid, and blood component therapy.
3. Identify and treat causes of respiratory difficulty including rib fractures, flail chest, pneumothorax, pulmonary contusion, and diaphragmatic hernia.
4. Treat rib fractures and open sucking chest wounds, perform thoracocentesis, and thoracostomy tube placement.
5. Identify hemoabdomen versus uroabdomen and correct anemia and hyperkalemia.
6. Identify and treat clinical signs of traumatic brain injury, spinal trauma.
7. Safely provide analgesia for the traumatized patient.

Agenda:

- Oxygen delivery
 - Components
 - Heart rate
 - Stroke Volume
 - Preload
 - Afterload
 - Contractility

- Other factors that affect DO₂
 - Cardiac dysrhythmias
 - Tachycardia/bradycardia
 - Intravascular volume depletion
 - Depressed myocardial contractility
 - Decrease hemoglobin/anemia
 - Treatment strategies
- Prioritization of global injury
 - Airway
 - Breathing
 - Circulation
 - Disability
- Discuss diagnosis and management of pneumothorax
 - Thoracocentesis
 - Sucking chest wounds
 - Thoracostomy tube placement
 - Rib fracture treatment
 - Analgesia
- Discussion of hypovolemic shock
 - Treatment
- Case examples to discuss when mechanical ventilation may be indicated over other oxygen supplementation therapies
 - Diaphragmatic hernia management
- Case example uroabdomen
 - Diagnosis
 - Management
- Traumatic brain injury and spinal trauma
 - Diagnosis
 - Management
- Safe analgesia in the small animal trauma patient