Lecture summaries

Yu Ueda

BS, DVM, PhD, DipACVECC
Clinical Associate Professor, Small Animal Emergency and Critical Care
Director of Extracorporeal Therapy Service
North Carolina State University-College of Veterinary Medicine, United States of America

RECOVER CPR Guidelines: Advanced Life Support

Cardiopulmonary arrest is scary, but in many cases, especially when caused by acute, reversible issues such as anesthesia, a trained and prepared team can successfully resuscitate the patient! In 2012, the RECOVER Initiative published the first evidence-based veterinary CPR guidelines based on an extensive review of the primary literature. Between 2019 and 2024, a group of over 300 veterinary and veterinary technician specialists answered a series of over 150 specific clinical questions about resuscitation through extensive evaluation of the clinical and experimental literature using the GRADE process. In this lecture, the updated RECOVER 2024 guidelines will be reviewed, highlighting changes to the recommendations for CPR in dogs and cats. This hour will focus on Advanced Life Support measures, including monitoring, drug administration, and defibrillation therapy for these patients based on the new RECOVER 2024 CPR guidelines. CPR can be successful if your team is trained and prepared. Come learn about these important, updated guidelines!

Learning goals:

1. Initiate advanced life support interventions in a dogs or cat in cardiopulmonary arrest, including monitoring, vascular access, and administration of reversal agents
2. Diagnose a non-shockable arrest rhythm and devise a plan for vasopressor, parasympatholytic, and buffer therapy, including drug, dose and frequency
3. Diagnose a shockable arrest rhythm and devise a plan for defibrillation and drug therapy, including dose and frequency

RECOVER CPR Guidelines: Newborn Resuscitation

The 2024 RECOVER evidence evaluation and treatment recommendation process was expanded to investigate the unique aspects of resuscitating newborn dogs and cats immediately after birth. In this session, attendees will learn about the RECOVER evidence-based newborn resuscitation algorithm. This algorithm provides a step-by-step approach to essential resuscitation measures for puppies and kittens as they transition from intra- to extrauterine life. Key questions addressed in this presentation are: Which newborns need resuscitation? How does the heart rate guide resuscitation measures? What monitoring should be used during resuscitation? Should oxygen supplementation always be given? How about doxapram? What is the most important intervention to save non-vigorous newborn puppies/kittens? Attendees will further gain awareness of how fundamentally different newborn resuscitation is from CPR in adult dogs and cats.

Learning goals:

1. Develop an approach to resuscitation in the newborn puppy or kitten based on heart rate.
2. Explain why ventilation is prioritized over circulation in newborn resuscitation efforts.

3. Describe the indications for the use of epinephrine during CPR in newborn puppies and kittens.
4. Describe the correct use of oxygen supplementation during newborn resuscitation.