## An update on hydroxyethyl starch: debate on current use

Hydroxyethyl starch (HES) has been widely used in veterinary medicine. However, potential side effects of HES have come to light, of which acute kidney injury and coagulopathies are the most serious. In this lecture the available evidence about the theoretical benefits of HES, and the evidence about the benefits/risks of the HES-alternatives will be discussed. For many of the colloidal-alternatives, the safety profile is even worse compared to HES (dextran, gelatin, human albumin solutions) or products are not ubiquitous available (allogenic plasma products, allogenic albumin products).

## Head trauma

Management of cats and dogs suffering from head trauma and/or traumatic brain injury is challenging. Head trauma is a complex disease and most patients suffer from additional injuries due to the initial trauma. In this lecture the initial patient assessment, neurologic assessment, extra- and intracranial stabilization, and supportive therapy of the head trauma patient will be discussed. A short overview about the pathophysiologic background of head trauma and increased intracranial pressure will be given as well.

## Parenteral nutrition: when and how

Enteral nutrition is the preferred route of feeding, because it is physiologically sound, less costly, and safe. Contraindications for enteral feeding are uncontrolled vomiting, malabsorption or maldigestion, or inability to protect the airway (stupors or comatose animals, animals on the ventilator). In these cases, parental nutrition provides an alternative. In this lecture, a stepwise parenteral nutrition plan, the technical aspects of parenteral nutrition, monitoring, and complications will be discussed.