The aim of this study was to determine whether the addition of constant rate infusion (CRI) to intermittent intravenous bolus (IVB) administration of furosemide resulted in an improvement in medical outcomes in dogs and cats with acute left-sided congestive heart failure (L-CHF)” Ohad et al (2018).

Abstract:

The aim of this study was to determine whether the addition of constant rate infusion (CRI) to intermittent intravenous bolus (IVB) administration of furosemide resulted in an improvement in medical outcomes in dogs and cats with acute left-sided congestive heart failure (L-CHF). A total of 76 client-owned dogs and 24 client-owned cats admitted with acute L-CHF were retrospectively divided between an IVB group (43 dogs and 16 cats) and a CRI group (33 dogs and 8 cats). The median furosemide dose used in dogs in the CRI group (median 0.99mg/kg/h; range 0.025-3.73mg/kg/h) was lower than the dose used in dogs in the IVB group (median 1.19mg/kg/h; range 0.027-7.14mg/kg/h; P=0.008). Respiratory rates were lower in the IVB group (P=0.005) and the CRI group (P=0.039) compared to pre-treatment values. The overall short-term mortality was 15%. A trend of longer hospitalisation in the IVB group relative to the CRI group (P=0.07) was shown. Creatinine and total plasma protein concentrations increased more in the CRI group than in the IVB group, suggestive of a higher risk of dehydration and azotaemia. There may be safety profile differences between CRI and IVB, warranting a prospective study using a larger sample size.
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