



FIGURE 10

Approach to Fluid Therapy for Dogs and Cats with Traumatic Brain Injury

* Fluid resuscitation techniques can be any one of the following or a combination thereof: (1) 10–20 mL/kg crystalloids (Plasma Lyte or Normosol-R) IV rapid infusion up to 60–90 mL/kg. (2) 5–10 mL/kg 6% HES (tetrastarch) IV rapid infusion up to 40–50 mL/kg. (3) 5–10 mL/kg plasma rapid infusion IV up to 20–30 mL/kg. (4) 3–4 mL/kg 7% HTS IV over 10–15 min. (5) Whole blood IV or pRBC, if indicated.

**Altered level of consciousness with or without bilateral or unilateral miotic pupils; unresponsive mid range pupil(s) or mydriasis; loss of the oculocephalic reflex; bradycardia with hypertension (Cushing reflex); posturing (opisthotonus, decerebellate, decerebrate); alteration of the respiratory pattern.

***1 g/kg mannitol IV up to 3 doses q 60–90 min OR 3–4 mL/kg 7% HTS IV.

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The 2024 Fluid Therapy Guidelines for Dogs and Cats are available at aaha.org/fluid-therapy.

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