A retrospective study described systemic hypertension (SHT) in dogs with acute kidney injury (AKI) and the efficacy of amlodipine besylate for its treatment. Fifty-two client-owned dogs with naturally occurring AKI were divided into two groups: those treated with amlodipine (n = 22) and those not treated with amlodipine (n = 30). Systolic systemic blood pressure (SBP) ≥160 mm Hg was defined as SHT and systolic SBP ≥180 mm Hg as severe SHT. Amlodipine was administered in increments of 0.25 mg/kg Q 1-3 h until a goal systolic SBP of 140 to 160 mm Hg was reached or up to a maximal cumulative dose of 1 mg/kg Q 24 h. Subsequent doses were based on the cumulative 24-hour dose necessary to achieve initial control and on individual clinical response to maintain the target SBP. Dogs reaching this target were considered responders, independent of the absolute change in SBP. Partial responders were dogs with decreases in systolic SBP of ≥20 mm Hg but failure to reach the goal SBP. Dogs with decreases of SBP <20 mm Hg that did not reach the target despite maximal daily dose of amlodipine were considered nonresponders. Amlodipine therapy resulted in a decrease in SBP of 24 mm Hg (12–34) and correction of severe SHT in 10 of 11 dogs within 24 hours. Further prospective controlled studies are necessary to confirm efficacy, evaluate potential negative effects of treatment on renal function, and refine treatment recommendations.

**Commentary:** This retrospective study is the first to describe the occurrence of SHT in dogs with AKI. At initial evaluation, 37% of 52 dogs were hypertensive and 15% were severely hypertensive. These percentages interestingly increased to 81% and 62%, respectively, during the period of hospitalization. The authors postulated that this increase could have been associated with progression of renal lesions and decreased ability to control SBP, fluid therapy and/or solute overload, and stress and/or pain resulting in adrenergic stimulation. Amlodipine treatment in 22 of the dogs resulted in significant rapid decrease in SBP with a response rate of 91% by 48 hours. Despite the SBP lowering efficacy, the amlodipine-treated group had a higher mortality (41% versus 17% in nontreated dogs). The higher mortality was likely associated with more severe renal injury in the amlodipine-treated group but this could not be confirmed. Routine recommendations regarding amlodipine use in dogs with SHT associated with AKI cannot be made without further study.—**Gregory F. Grauer, DVM, MS, Diplomate ACVIM**


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**Investigation:**

Disease & Shelter Adoption

Investigators reviewed medical records of puppies and kittens, ages 6 to 26 weeks, from a metropolitan animal shelter to determine what medical risk factors delayed veterinary approval for adoption from the time of intake. Of the 333 puppy records randomly selected, 41.7% had no abnormalities identified by the shelter veterinarian at the time of admission. Puppies with skin (12%), respiratory (22%), and digestive (38%) diseases found at intake were significantly more likely to be delayed for veterinary approval for adoption. Of the 364 randomly selected kittens, 28% were healthy at admission. The 4 most commonly reported diseases in this species were respiratory (45%), GI (39%), ocular (26%), and skin (11.6%). The presence of respiratory or digestive disease at intake significantly delayed approval for adoption. Stray kittens were more likely to be delayed than owner-relinquished kittens and the odds of delay decreased by 2% for each week increase in the kitten’s age. For puppies and kittens with respiratory and/or ocular disease, treatment with antibiotics within 24 hours of admission significantly decreased the time between admission and approval for adoption. Prompt administration of antibiotics for ocular and respiratory diseases at admission may shorten the length of shelter stay.

**Commentary:** Minimizing the length of stay of shelter animals is critical to maintaining their physical and mental health in the shelter environment. When length of stay is minimized, more animals can move through the shelter system in a given period, resulting in more lives saved. In addition to identifying several risk factors for delays to adoption, this report demonstrates the effect of prompt-yet-judicious use of antibiotics on lessening some of those delays. These findings highlight the importance of early evaluation for signs of infectious disease as well as the positive influence of veterinary involvement in the creation of shelter animal health care protocols.—**Brian A. DiGangi, DVM, MS, Diplomate ABVP (Canine/Feline)**