

Effects of Furosemide and Fluid Therapy in Bearded Dragons (*Pogona vitticeps*)

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Assessing dehydration and adequately rehydrating a reptile patient remains difficult and understudied. In addition, the use of furosemide, a loop diuretic, in reptiles, which do not possess loops of Henle, is controversial. In the first phase of this study, the effects of furosemide (5 mg/kg and 10 mg/kg administered every 12 hours for up to 4 doses) were evaluated in a randomized, controlled, complete cross-over design. Body weight, uric acid, packed cell volume, total solids, total protein, and osmolarity were measured at baseline and once the bearded dragon was dehydrated. In the second phase of this study, bearded dragons were experimentally dehydrated using furosemide and then administered different electrolyte solutions (PlasmaLyte A, lactated Ringer's solution, and Reptile Ringer's 1:1 D5W and PlasmaLyte A) in a randomized complete-cross-over design. Fluids were administered as a single subcutaneous bolus as 5% of the dragon's original body weight. Changes in the previously measured parameters were measured 4 and 24 hours post-fluid administration.