Association of Reptilian and Amphibian Veterinarians

Advancing reptilian & amphibian medicine, surgery, & conservation



ARAV Monthly Herp Blerp

Greetings from the ARAV Technician

Issue 9, November 2013

Hello my Reptilian and Amphibian shugs,

Brrr! Feeling a little chilly?! (Well, perhaps not our Aussie friends.) Well have I got a treat for you! A little contest because who doesn't love a little competition! So here's the skinny. I want to see pictures of YOU and whoever is around you at the clinic reading the Herp Blerp either on paper or on a screen. Send your photos to **e.medecvt@gmail.com** and I will post them not only in our epic Facebook group the Association of Reptilian and Amphibian Veterinarians Members Group but one lucky winner will receive a FREE t-shirt from ARAV!

That's right folks, win a **FREE ARAV t-shirt** AND most importantly, **bragging rights**! Submit those photos!

As always, we want to hear from you! Send in your articles (references aren't needed), your tips and tricks, your important dates and student functions. We will be restarting the AVTCP questions (now that their boarding session is over for the year) in December!

I am so not Dr. Mader who writes for the newspaper weekly (and keeps it fresh every time!), so I need a little help from you, the technicians, the vets, and the students! We want to hear from YOU! Contact me at e.medecvt@gmail.com and let your voice be heard.

Your Herp Blerpin' Tech,

Erica Mede, CVT

IO You a Lesson in IO Catheters

Often times, reptiles presented to a veterinary hospital are dehydrated to some degree and may require fluid replacement therapy. This can be as simple as administering fluids by mouth, under the skin, or in the coelomic cavity. However, more critical cases may require a faster route of fluid delivery. In larger animals (mammals), intravenous routes can usually be readily accessed to provide rapid fluid administration. However, this presents a problem in small animals, such as reptiles, as veins are not often easily identified. In an emergency situation, fluids can be delivered via an intraosseous (IO) catheter. This route provides rapid fluid absorption to quickly rehydrate the animal.

The preferred sites for catheter entry in lizards are the distal femur and proximal tibia. A spinal needle with a stylet should be used to prevent bone cortex from lodging within the needle. This is a potentially painful procedure, so a local analgesia (lidocaine) should be applied to the entry site. The needle should be inserted and advanced into the bone using constant pressure and a gentle twisting motion when the stifle is flexed. If inserting into the tibia, the tibial crest will serve as landmark, while with the femur, the anterior surface of the distal femur is the point of entry. Once the medullary cavity is entered, the resistance against the needle will give way. When the needle is firmly seated within the medullary cavity of the bone, you should be able to move the entire limb by just holding onto and moving the needle. To ensure proper placement of the needle, though, radiographs are very helpful. Fluids should be administered slowly over 10-15 minutes.

While this method provides a good route for rehydration in lizards, it is more difficult to accomplish in chelonians, and not possible in snakes. IO catheters are more difficult to place in chelonians because of the shell (especially if they withdraw into it) and the shape of the femur. The tibia can be used in very sick chelonians, and there have been reports of using areas of the shell. However, accessing the medullary cavity of the shell may require more intensive techniques, such as anesthesia, that may not be practical in an emergency situation. Additionally, one study has shown that jugular catheters provide a more rapid and wider fluid distribution in chelonians as compared to IO catheters.

References:

Mader, DR. Reptile Medicine and Surgery, Second Edition. Saunders

Elsevier. 2006.

Young, BD. Comparison of Intraosseous and Peripheral Venous Fluid Dynamics in the Desert Tortoise (Gopherus agassizii). Journal of Zoo and Wildlife Medicine 43(1): 59-66, 2012.

Amanda Harris

Purdue University Class of 2015

Tips, Tricks, and Toys

At our clinic we use a 3-6 cc syringe case to prevent reptiles like iguanas from biting their tongues and the endotracheal tube during induction and recovery. Works great and you can monitor mucus buildup too.

- Gina B.

Have a helpful tip? A fun trick? Or a review on a new machine?

Submit them!



Student Chapters

Great news!

Dr. Colin McDermott told us that the student chapter website it being renovated. In even better news, the listing of intern and externships will be updated soon as well!

Stay tuned.



Whoa! Will Ya Look at That ...

Interesting cases that make you go hmmm.

History: Owner fed his Green Tree python what he thought was a freshly killed rat. When the snake struck the rat, the rodent sprang back into consciousness and the snake let go immediately and collided with the enclosure wall. After that the snake refused food for 4 weeks.

Diagnosis: Fractured cranial bone seen on skull series radiographs! Not only did our slithering friend give himself a fracture, he probably gave himself a concussion to boot.



Treatment: Injectable Meloxicam daily for 14 days to reduce swelling and pain and gavage feeding enteral carnivore diet starting at half the recommended caloric requirements and gradually building up to full caloric recommendation.



Upcoming Events and Deadlines

Save the Date:

ARAV, AAVAC, and the Unusual Pet and Avian Veterinarians Group of the Australian Veterinary Association Combined Conference will be held April 22-24, 2014 in Cairns, Australia.

Watch your inboxes, a call for papers will be coming sooner than you think! Start those papers now folks!

Have you renewed your membership for the upcoming year? If yes, GREAT WORK! If no, go to

www.arav.org and renew now and we won't tell Wilbur or Rachel on you!

Questions, comments, or just wish to submit something to the newsletter?

E-Mail Erica at: e.medecvt@gmail.com