## Association of Reptilian and Amphibian Veterinarians

Advancing reptilian & amphibian medicine, surgery, & conservation worldwide

# **ARAV Monthly Herp Blerp**



#### **Greetings from the ARAV Technician Liaison**

Issue 16, June 2014

Hello my Reptilian and Amphibian shugs,

This greeting has been commandeered by our friends on the Membership Committee. A friendly reminder, if you are a member, ahem that would be you there, please remember to update your listing on our Find a Vet page for the ARAV website. This is an important perk of being a member! Help the reptile community find YOU!

If you would like to stay up to date on what everyone around the world is treating currently, check us out on Facebook! Scan the code (yes, even from your computer unless you are reading this on your phone) or track us down! We have a members only group that you don't want to miss!!

Your Herp Blerpin' Tech,

Erica Mede, CVT



#### **IBD: Driving Snakes and Clinicians Nuts!**

Inclusion Body Disease (IBD) is a disease characterized by intracytoplasmic inclusions in epithelial cells of various tissues and in neurons. It is found in boas and pythons. In boas, it is often found without clini-



cal signs, while in pythons it tends to be more severe, swiftly moving from the digestive manifestation to the neurological presentation which includes not being able to right itself when in dorsal recumbency and progresses to death within days of clinical signs. In boas, the first signs can be as simple as general ill thrift, weight loss, anorexia and poor wound healing which may progress to regurgitation and neurologic signs such as inappropriate tongue flicking.

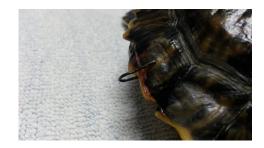
Complete blood counts and chemistry may reveal a leukocytosis and both leukocytes and erythrocytes may contain intracytoplasmic inclusions. Chemistry values are generally normal. Characteristic inclusion bodies may be found in affected internal tissues such as liver, kidney, stomach and esophageal tonsils with a biopsy, resulting in a definitive diagnosis.

The etiology of the disease is believed to be viral and the virus may be spread through exchange of body fluids which may be passed through fighting, breeding, and fecal oral contamination. Mites have been discussed as a possible vector.

### Tips, Tricks, and Toys



For turtles with marginal scute fractures it can be hard to stabilize the area. We used the "eyes" from a hook and eye set for clothing to create a sort of splint used with epoxy to hold it in place.



- Lisa B.

Vertical transmission is believed to be possible. As this disease is not curable, most owners elect to humanely euthanize their affected snakes. If the owner of the snake should elect to keep the snake alive through supportive and palliative measures such as hand feeding and syringe water feeding, it is important that they isolate their snake and not sell the snake or its offspring as this may result in further spread of the disease.

The inclusions found in IBD affected snakes consist of a protein, IBDP, and recent research has been done to characterize this protein and possibly use it to help refine methods for the diagnosis of IBD (Chang et al., 2013). Recent research also points to arenaviruses as the cause of the disease (Stenglein et al., 2012). The identification of snake arenaviruses has opened up options both for the development of diagnostic methods as well as for treatment of IBD in snakes and more research is necessary to understand this disease, its transmission between snakes, differences in clinical progression, optimal methods for diagnosis, and treatment options.

Chang L-W, Fu A, Wozniak E, Chow M, Duke DG, et al. (2013) Immunohistochemical Detection of a Unique Protein within Cells of Snakes Having Inclusion Body Disease, a World-Wide Disease Seen in Members of the Families Boidae and Pythonidae. PLoS ONE 8 (12): e82916. doi:10.1371/journal.pone.0082916

Stenglein MD, Sanders C, Kistler AL, et al.(2012) Identification, characterization, and in vitro culture of highly divergent arenaviruses from boa constrictors and annulated tree boas: candidate etiological agents for snake inclusion body disease. *MBio* 3:e00180-12.

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**Edited by Dr. Rachel Marschang** 

#### **Student Corner**

Collin is happy to announce that there are updates being made to the student section of the website! This includes changes in student chapters, changes in externship and internship sites, as well as important life altering updates for you! Stay tuned for more information to unravel!

#### **ABVP Announcement!**



For all of you interested in becoming boarded in Reptile and Amphibian medicine come visit the 19th Annual ABVP Symposium in Nashville, Tennessee October 30-November 2, 2014. Find out more information at www.abvp.com

#### **Mark Your Calendars ...**

October 8 – 12, 2014. Wild West Veterinary Conference. Reno, Nevada, USA.

October 18 – 24, 2014. 21<sup>st</sup> **Annual Conference of the Association of Reptilian and Amphibian Veterinarians.** This will be a concurrent conference with the American Association of Zoo Veterinarians and the Association of Exotic Mammal Veterinarians and will be held at Walt Disney World, Orlando, Florida.

November 9 – 13, 2014. **World Association of Zoos and Aquariums Annual Conference**. New Delhi, India. Contact: <u>www.waza.org</u>.

Questions, Suggestions, or Articles can be Submitted to: e.medecvt@gmail.com