Clinical Update:
Sea Turtles

Caveman: Another week and some progress has been made. After 30 days and a momentous bowl movement yesterday, all the BIPS have passed. I attribute some of the mild weight loss with Caveman this week to the extra effort in fecal production, but things move from stem to stern and that’s good. There is still some plant material in the sample, and no parasites were observed. Tissue enzymes continue to fall and we are monitoring the white blood cell count for stability after a dip, and the red cell count is hovering just above a significant anemia.

In an effort to see if we can increase the amount of tube feedings, barium was mixed with a meal, which dutifully sat in the esophagus after tubing, but when Caveman was moved, he regurgitated the material back up. If a turtle regurgitates after a feeding, keep the head lower then the body until the material is passed, and clear the nostrils with water, and carefully rise the oral cavity with water. Once the material stops coming out, and the animal is able to take clear breaths, give the animal some time to swim to aid in clearing the mouth, while being observed. Be consigent of the glottis and airway at all times. Since in this case barium was mixed with the food, a full radiographic study of the lungs were conducted one half hour later to be sure none of the material was aspirated. It was not, but we can not safely increase the volume fed at this time. Radiographs did document the extent of the full perforation of the left front flipper (LFF) digit three (D3), between phalange (P) 3 and 4, with little osteolysis, if the blood flow to the tip of the flipper is compromised, the tissue will die and require amputation. This minor procedure could be accomplished with a local anesthetic. Another mild lesion of RFF, D3 distal rostal tip of P3 was observed, this should not be a major problem, and can be monitored.

While being handled for the physical exam, as they are often want to do the turtle passed some urine, please help complete Caveman’s evaluation this week by collecting a sample for analysis at an outside laboratory.
A CT review was performed and major findings were free colemic gas, focal pulmonary consolidations, and a mass effect in the left caudal coelum. The free gas was confirmed by repeating the CT with the animal in the supine position and observing the gas move from below the lungs to below the plastron. Despite multiple procedures to pull the gas off, new gas is apparently continuing to be produced, perhaps from a ruptured lung or pulmonary bulla. Two areas in the lung require additional monitoring which one in the ventral left lobe, which may be the bulla, and another more central in the parenchyma likely is pneumonia with spread of a bacterial or fungal pathogens via the blood.

**Problem List [Jan]**

<table>
<thead>
<tr>
<th>Enterococcus</th>
<th>Septicemia sp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypoglycemia</td>
<td></td>
</tr>
<tr>
<td>Anorexia</td>
<td></td>
</tr>
<tr>
<td>Pneumonia (possible ruptured lung)</td>
<td></td>
</tr>
<tr>
<td>Free colemic gas (with positive buoyancy, a floater turtle)</td>
<td></td>
</tr>
<tr>
<td>R/o: Ruptured lung, ruptured GI, anaerobic gas producing bacterial infection, ideopathic</td>
<td></td>
</tr>
<tr>
<td>Unknown renal and hepatic function</td>
<td></td>
</tr>
<tr>
<td>Elevated tissue enzymes</td>
<td></td>
</tr>
</tbody>
</table>

**Treatments**

- **Antimicrobials**
  - Ampicillin
  - Enrofloxicin
  - Fluconizole
- **Metabolic support**
  - Fluids with dextrose, reptile ringers daily
  - Tube feeding fish gruel daily with B vitamins, calcium and potassium
- **Wounds care**
  - daily
Fleatcher continues to do well and has put on a little more weight. Another blood sample was collected to monitor an elevated uric acid and following the falling tissue enzymes. His tank remains clear, and check with Brian so you can see the “good” ‘dry’ foam that we like to see in the protein skimmer, and ozone is being set up for the system to further improve water quality. As we returned Fletch to the tank after a weight measurement and physical exam, he left us a fecal sample in which I was able to isolate a single trematode ova. Loggerheads have a long list of intestinal flukes, but in our area I have only found *Orchidasma amphiorchis*. Hopefully further studies will one day be able to match the ova to a species of parasite. Treatment with praziquantel in the future will be considered but as the infestation does not appear to be causing harm, some additional research into consequences of treatment options will be reviewed.

**Terrapins**

The Diamondback terrapins have stopped shedding and have more water in which to swim. They continue to eat well and we continue to strive to provide a varied diet.

**Cooters**

The Red-bellies are likewise doing well and do their best to be messy, while they grow.

**Sea Turtles at Large**

Lavender continued to check in this week and is largely stationary off the Carolina’s coast.

**Safety Seals (health and safety tips around the center)**

Electrical safety and salt water: Water and electricity still don’t mix, even after all these years. While we have had no incidents at the center we must remain ever vigilant, because we have salt water systems and electric systems for life support in close proximity. Never allow electric cords or extension cords on the floor, where water may spill or have contact with the cables. Never overload an outlet. Discuss any tripped breakers or unusual occurrences with Brian. Let’s be safe out there.

Sea Rogers Williams VMD

Attending Veterinarian & Director of Science

Kathy Zagzebski, Bridget Dunnigan, Brian Moore, Joanne Nicholson, Julie Seligmann