

Rounds

Animal Health
Department

Medical Rounds

"medicine for all"



Caring for Stranded Marine Animals

NATIONAL
MARINE
L I F E
CENTER

Notes

Veterinary Research
Department

Under the microscope

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Rounds Notes is a report on the health of animals at the National Marine Life Center from Sea Rogers Williams VMD for the staff, volunteers, and community of the center including professionals involved the captive care of similar species, the views expressed are not necessarily that of NMLC. Information in Rounds Notes should be considered confidential and used solely to benefit the health of aquatic animals everywhere.

November 3, 2009

Rounds Notes

22: 52-54(2009)

Headlines News: Bucket Full of Cooters

Red-bellied cooter headstarts arrive

The Class of 2010 red-bellied cooters have arrived. Due to the late natural hatching and small size they have not received scute notches but we have marked them according to the state protocol with marginal coloration with a Sharpie®, our cooters have been identified as 1-8 in the lower right quadrant. They are all eating and seem to have acclimated well.



Clinical Update: Shell Game

Patty's shell may show signs of healing

Here is what we did to turn the tide on the shell infection. Based on superficial culture, which we accept as a poor indicator of tissue infection but is non-invasive compared to the dermal bone biopsy which would be needed for more accurate assessment, we discontinued ceftazadime and started amikacin therapy [5 mg/kg IM once, 2.5 mg/kg IM q 3 day- front body] and the following shell treatment.



Clean the shell and skin with dilute betadyne soaked sponges and allow to sit for 10 min. Rinse or blot the shell and apply a thin layer of Muricin (mupirocin 2%). We only use SSD prior to basking and it is removed following basking.

The amount of dry exposed bone is decreased and evidence of re-epithelialization can be seen in the faint scute pattern seen over the dermal bone with a faint tan color as opposed to the dry dermal bone which is more white.

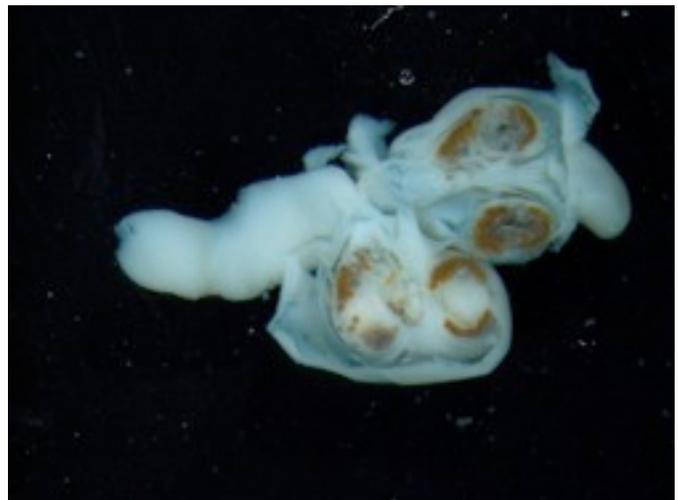
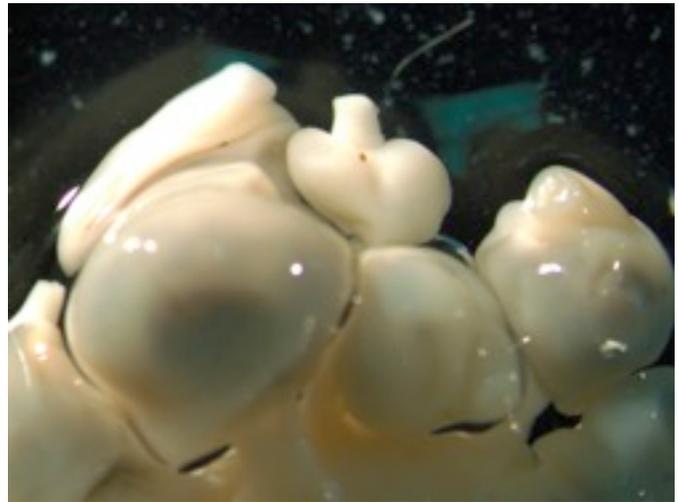
Patty's vision and neurological function continue to be normal on physical exam which resolves two of her major presenting problems but the shell still has a long way to go. A

proliferation of mineralized material on the upper rhaphotheca was easily removed with a wooden tongue depressor, this is likely due to lack of natural feeding habits and some harder food items can be offered. We also know that follicle development had started and we will need to follow this with radiographs and ultrasound to see if she will lay eggs while in captivity.

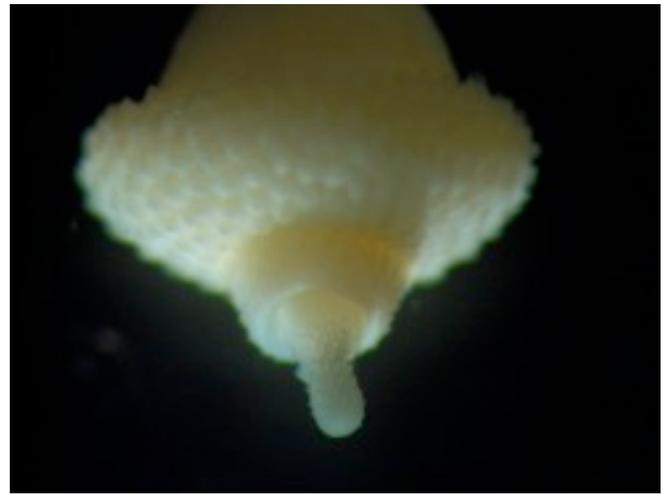
Under the Micoscope:

With grateful assistance from Kathy Z and Katie T-M, we submitted our third attempt at Prescott funding for the veterinary study of parasites in marine mammals, we should hear back in June. meanwhile to be sure the equipment we do have is sufficient for study and working I picked up a few cases from the inbox.

The common cetacean gastric trematode *Braunina cordiformis* was observed and documented from a Harbor porpoise in a case sent to us by the Cooperative Oxford Lab. This trematode as a unique attachment resulting in an infolding of host tissue to ensures it's firm attachment to the stomach wall even in death. Both the host and parasites were on the small side, perhaps they were just starting their lives out together. The burden was moderate but not likely associated with the stranding or death of the porpoise.



Another case from the DEL-MAR-VA involved a dead stranded Sei whale with a significant burden of acanthocephalans in the intestines. The morphological study is consistent with *Bolbosoma turbinella*, which is found in the northern bottlenose whale, sei, blue, fin, humpback, and northern right whales. Here too the attachment survives the host's death and the identifying proboscis had to be dissected free of the fixed host tissue. While the numbers were impressive the lack of evidence of intestinal perforation makes their presence unlikely to have been the sole factor of the stranding.



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