

# Rounds

Animal Health  
Department

Medical Rounds

"medicine for all"



*Caring for Stranded Marine Animals*

NATIONAL  
MARINE  
LIFE  
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.

April 27, 2009

*Rounds Notes*

6: 15-17(2009)

## Headlines News: No, she's not a soft shelled turtle

### but she does have a soft shell

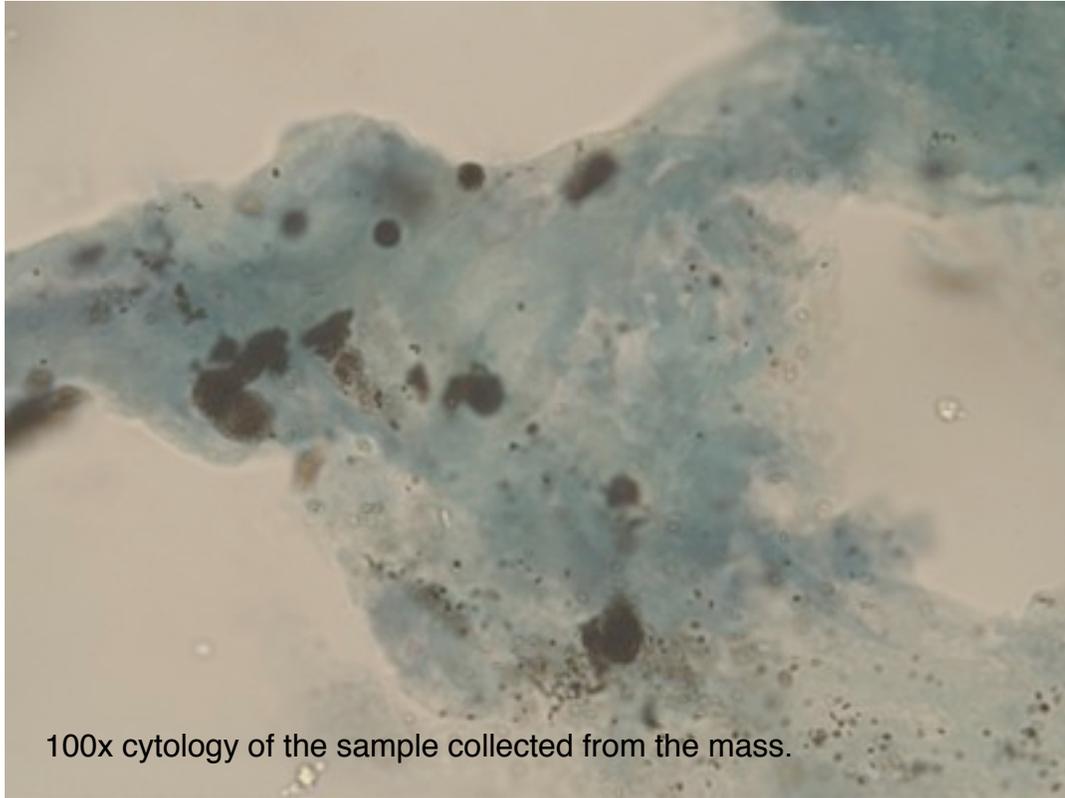
So the shell is gone, the last remnants of the necrotic dermal bone have been lifted away and only a few islands of pigmented tissue are left in the center and there is a rim of pigmented pseudo-shell (epithelium?). The CT scan showed new bone under the skin but this will take a long time to develop. Meanwhile Patty is eating and weight has been stable at 1.2kg (down only the loss of shell). The plastron seems unaffected.

The plan for Patty is to monitor her progress and regrowth of the shell, if that is going to happen. She will need to be protected from direct sun-light or abrasions until a pigmented and keratinized carapace is restored, which could take several years. Without necrotic bone trapping water and debris Patty has been taken off antibiotics.

We have been monitoring a mass under the skin that is freely movable on the left side for quite a while. At first the swollen tissue seemed to be renal tissue but became isolated and movable, perhaps a sequestered infection or a tumor. A percutaneous needle soft tissue core sample was collected for histopathology, aerobic and fungal culture, and cytology to answer these questions. A sample of blood was also collected but as is typical for Patty the sample was largely contaminated with hemolymph.

Patty was given some pain medications and was reasonable good for the procedure which was quick and provided good cores of tissue. Cytology found mostly epithelial cells with melanisitic granules and some large dark brown structures which could also be pigment, finer detail and a definitive answer should come from the histopathology.





### **Under The Microscope:**

#### **some interesting parasitic cases from Virginia**

The Virginia Aquarium Stranding Response program was well represented at the national stranding conference and they took the opportunity to deliver some parasites during the lab on I taught on parasite collection and preliminary identification and review of major taxons.



I've examined the nematode *Sulcascais sulcata* from a loggerhead, seal lice (*Echinophthirius horridus*) from a harbor seal, and one a many lungworms, one called *Pseudalius inflexus*, from a Harbor porpoise. This lungworms in porpoises are often significant and can cause stranding and clinical effect their rehabilitation.

## Terrapins, Cooters, and Turtles, oh my . . .

### Diamondback with an abnormal scute pattern

Poor number 4 is deformed, not terribly and the abnormality has been present from hatching, but we took another look, and some pictures, of the vertebral scutes. The normal pattern is five vertebral scutes centered along the spine (right), but number 4 (left) has six with an interlacing pattern. Since we know from Patty plight that the vertebral canal and vertebra are not directly attached to the scutes, and that number 4 has no neurological deficits in the hind limbs and can use all four limbs normally this will serve only to make number 4 special.



### Cooter shell erosions are responding to treatment

A few of the red-bellied cooters (6,2,7, 8) have developed some erosions and exposure of bone between the scutes. We've seen this before and reinstated last years protocol of cleaning the shell with a soft brush, chlorohexidine application, and some SSD to clean and protect these areas, progress has already been made. There have been a few spikes in ammonia in this tank, and as they get bigger and even messier maintaining water quality is imperative.



These areas are localized and very small, but it's important not to allow a small problem to become a larger one.

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