

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 13, 2012

Rounds Notes

6: 21- 22(2012)

Headlines News: Not for the faint of heart

local seal with necrotic wound of the face

The NMLC admitted it's first endemic harbor seal (NMLC 12-019 PPv), which was spotted locally along the Cape Cod Canal, responding with Katie Moore of IFAW, our Kate helped collect the animal as the serious nature of her wounds precluded any further waiting period.

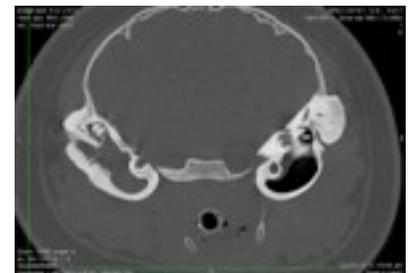
I must warn you that the images are graphic and so I'll complete the update on Townsend and for those who do not wish to read on, do not turn to page 2 for the story on this new admission.

Clinical Update: Townsend Surgery Schedule

ventral bulla osteotomy anyone ?

After securing permission from UNE MARC and NOAA, we have partnered with Cape Cod Veterinary Specialists to preform a ventral bulla osteotomy on Townsend in 2 weeks for left sided persistent otitis media. The pus filled bulla is an abscess, and the treatment for an abscess is drainage not antibiotics, which are used to control local cellulitis and prevent rampant spread of infection. The middle ear has an opening via the eustation tube, but this is a narrow tube and located dorsal in the bulla and not idea for flushing the thick purulent material. This seal also has an opening via the ruptured ear drum and the external ear canal which is long, thin, and also not conducive to draining the infection. So, a surgical hole in the floor of the bulla can be made with power tools. The bulla is approached from the skin avoiding any number of large blood vessels and nerves, the bone exposed, a hole made, the mucoperiostium incised and sampled for culture and histopathology, the bulla flushed out and the mucoperiostium removed, a drain is then placed and the wound closed in layers, this actually sounds easier then it is, and peri-surgical morbidity and mortality is significant. But if successful may provide the best environment to cure the infection and allow the ear drum to heal.

We are grateful for the interest of CCVS staff, as with the development of any procedure in a novel species, it may take several attempts before we are reliability successful, but our goal is provide knowledge and skills that can be applied across the stranding networks for this serious medical condition of phocids.

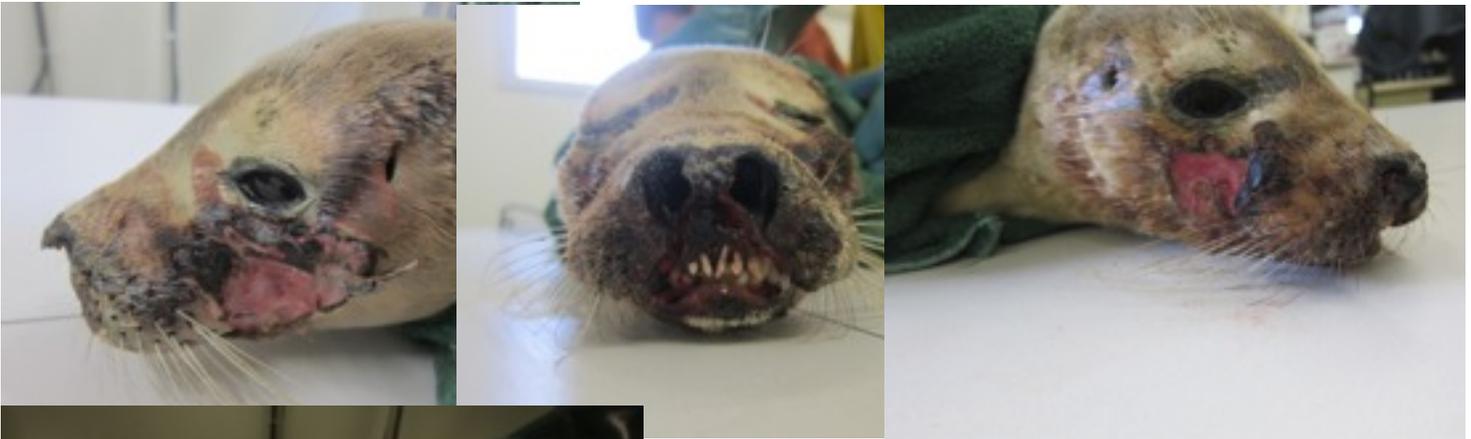


Phocids, the true seals: Wound of Unknown Origin has anyone seen the likes of this ?

NMLC 12-019PPv presented with a large necrotic wound with a developing granulation bed beneath the necrotic skin. The smell was horrible, even for a seal, and that is saying something. The seal was given pain meds [buprenx 0.5cc 0.3mg/ml IM, meloxicam 0.1 mg/kg SQ SID], fluids [500ml saline or LRS SQ BID], amikacin [3 mg/kg IM SID] and ampicillin [7 mg/kg IM BID]. We are protecting the eyes with flush or ophthalmic ointment and using tongs to hold betadine soaked sponges to the wounds to clean and gently debride the necrotic tissue. After she was nicely pain free and a little sedate I was able to surgically remove some the necrotic tissue and expose the granulation bed. We'll try this for a week and she how she does, the prognosis is guarded, for one the nasal plantum is greatly involved and the ability to seal off the nostrils is compromised, if this function does not return she may not be a release candidate. Some terrible wounds of the face can heal given the right environment, but only time will tell. We could certainly loose this seal to sepsis, despite our treatment efforts. On the good news front, her chest films were within normal limits, a skull radiograph showed no gross osteomyelitis nor fractures. Her blood work demonstrated: acidosis (pH=7.292), dehydration (Na= 179, TP = 9.6), a Cushionid stress response (Na = 179, K=3.1, Cl= 140), a possible GI bleed (BUN / creatine = 132), and anemia (HCT= 40%). Interesting to find that WBC was WNL (8.9 thou/ml). A urine analysis found hematuria but no casts, with highly concentrated urine (SG=1.047).

Alright, here are pictures I promised but don't say I did not warn you:

And, here we are, all nicely cleaned up after treatment. A biopsy was taken of the infected skin



at the margin of the wound to see if it can shed any light on the cause, but we may never know what caused this wound, if you have ever seen a wound pattern like this in a seal, please email me at rwilliams@nmlc.org. The prognosis is guarded, but we'll try or best, and keep you informed. Sea Rogers Williams VMD