Headlines News: Trichosporonosis, in reptiles still elusive

if only turtles had hair

The latest culture (3rd attempt) sent for fungal isolation failed again due to bacterial overgrowth. With so much background in the cultures we could rely on the molecular data and the identification of Trichosporon species (99% T. dermatis or T. mucoides) but which was it? A quick PubMed search for Trichosporon yields over 550 articles on the biology and pathology of this genus of mould. Most immunocompromized hosts a division among the 20 or so cause only superficial keratin (White and Black Piedras) and invasive and disseminated, disease. As luck would have former is more benign and the problematic. After consulting Identification Laboratory, we the yeast here before sending identification. Our yeast (the of Catch-22) has a well defined and repeatable morphology that we can readily detect, and so our success or failure should be apparent. Starting with some highly antibacterial growth media (SAB DEXT + cholor and gent) might help.

As it stands, Catch22 suffers only from a disease of cosmetic morbidity (I love this phrase and it gives new meaning to ‘ugly duckling’). When Trichosporon effects the keratin of the hair shafts of people (White Piedras) the offending hair is just shaved off, and even more bizarre practice of some indigenous peoples to encourage the growth of Trichosporon on their hair as a form of hair coloring (Black Piedras).

Who is at risk for systemic Trichosporonosis? The human literature is clear, the immunocompromised (AIDS, chemotherapy, transplant recipients), use of chronic systemic corticosteroids, cancer patients, burn patients, and premature neonates. Zoonotic reports are scarce and I could find none from any reptile species, but dogs, rabbits, cows, horses and monkeys have been infected. Is Catch22 at risk for systemic disease? not currently, but I feel further investigation is warranted in this fungal infection of the shell on an endangered species.
Clinical Update: Little Cooters, Little Lesions

let’s not let a ‘marginal’ disease become a problem

It’s that time of the year again, four of the red bellied cooter hatchings have developed mild ulcerative dermatitis lesions between the scutes. The lesions are small pits and are associated with rapid turtle growth and water quality. We have seen this each year and have kept it from becoming a problem by cleaning the shells of effected cooters. The Cooter Carapace Cleaning Protocol has been reposted and is in the clinic. I treated #2, 5, 7, 8 today. Each uses their own toothbrush for cleaning (you would not want to share a toothbrush, neither do these cooters).

For now, let’s clean the shells 2-3 time a week, and if more cooters are effected, or we notice the areas growing we will have to increase the frequency of cleaning.

Cytology from #2&7 showed a mixed bacterial populations are present in the gook removed from the small ulcerative pits, and a single protozoa, likely eating the bacteria that is present, and more of a water quality
indicator then any form of pathogen. We know where the bacteria come from, and the total coliform test is selective, meaning all of these Gram positive cocci and killed off in the growth media. What allows these lesions to get started? water quality? scratches? rapid shell growth? we don’t know for sure but perhaps this is how the fungal infection that Catch22 has got started, so let’s not allow that to happen here and keep the cooters clean and healthy.

**Clinical Update:** Teanna bides her time

*as soon as the snow stops*

Teanna is doing well, and we will consider a release exam and blood work if the snow ever stops!

**Safety Seal of Approval:**

Wash, wash, wash your hands

With additional cultures potentially going on in the clinic remember, no food or drinks in this area. Wash your hands after even being the in the clinic, and always wash thoroughly before eating or drinking. Wear gloves when handing animals or bacterial/fungal culture plates, vials, or tank water (it has bacteria, just look at the total coliform counts). Change gloves if they leak and between patients, wash hands between tasks. And remember looking at the soap dispenser while briefly wetting the hands is NOT hand washing. We already have E. coli in the clinic culture dishes used for water quality so be careful. Bacteria can’t jump from a dish to grab you, and can be cleaned away with proper and routine hygiene. Bacteria and yeast are not dangerous when handled appropriately and we take reasonable precautions.

Here are some tips from the CDC:

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