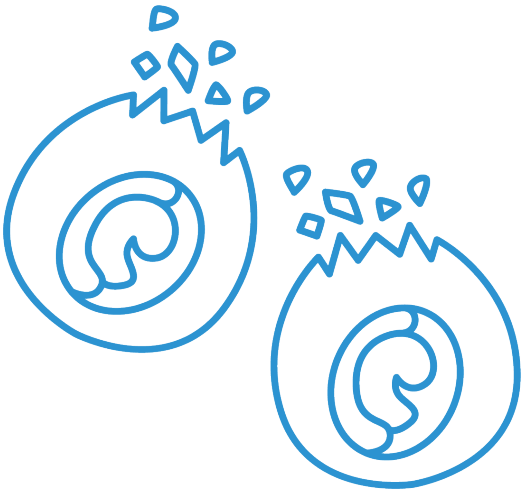
drip.vet



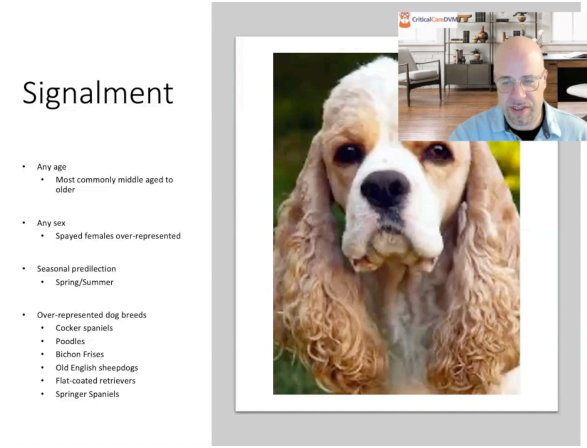
IMHA

micro drip study guide

December 22, 2021

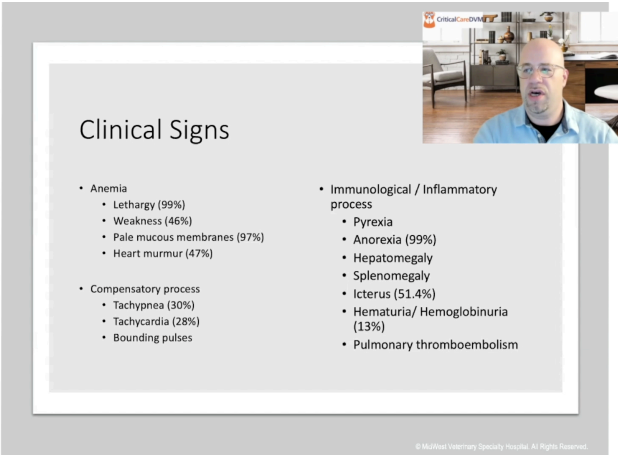
Instructor: Dr. Christopher G. Byers, DVM, DACVECC, DACVIM (SAIM), CVJ

Be advised this document is here to enhance your learning experience and is a cumulative of the slides and transcript & area for your notes. You are welcome to take your notes electronically or print then use it to supplement your learning while watching the drip

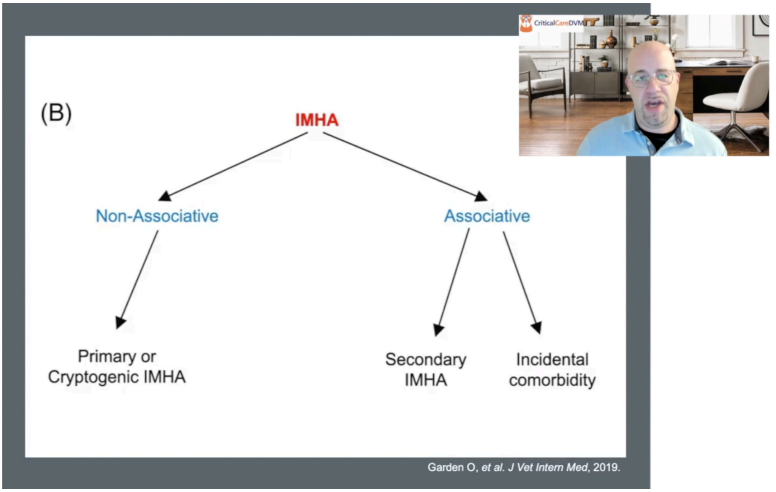


So any of our dog friends and cat friends can get IMHA. We do see that female spayed animals are over-represented in the canine side. And we do have this apparent seasonal predisposition, spring and summer being the seasons of choice. And that's partially led to the concern about a vaccinal-associated immune response.

There are a lot of breeds that are over-represented. And I will always share a picture of a cocker spaniel because these guys get one heck of a form of this disease. And you really have to fight hard for them. I do consider being a cocker spaniel to be a negative prognosis for this disease. It doesn't mean I don't fight for them, but it's rough.



So all of the clinical signs that our patients with IMHA could manifest can be broken down as to whether they're caused by the anemia, whether it's because of the compensatory response to the anemia. Or is it because the immune system is angry, and we have a lot of inflammation coming?



We divide IMHA into whether they are associated with something as the trigger event or non-associated with anything. You're probably used to the terms primary and secondary.

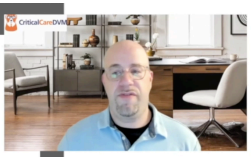
And if you want to keep using them, I say fine. But the people that really love IMHA and the societies that I love reading their papers have decided to now call it associative and non-associative IMHA.

So essentially, associative is your secondary, and non-associative is your primary or autoimmune.

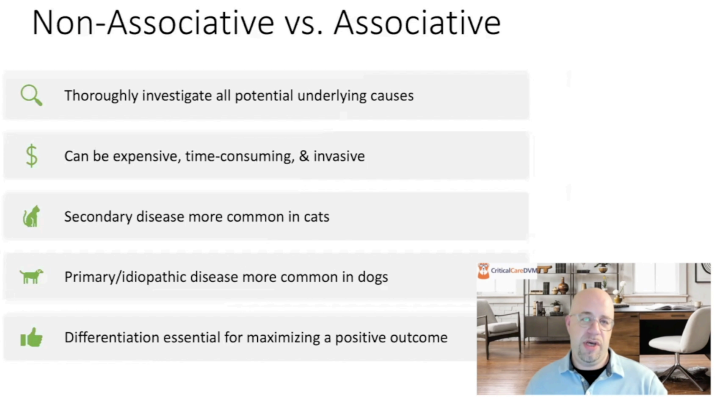
Table 2: Known, Suspected, & Possible Comorbidities in IMHA

Cause	Dogs	Cats
Infections	Babesiosis Anaplasmosis Dirofilariasis Ehrlichiosis Borreliosis Hemotropic mycoplasmosis Bartonellosis Leishmaniasis	Babesiosis Hemotropic mycoplasmosis FeLV FIV FIP Soft tissue infections UTIs
Cancer	Mast cell tumor Pheochromocytoma Undifferentiated sarcoma Hemangiosarcoma Carcinoma Malignant histiocytosis Myeloid neoplasia Multiple myeloma	Lymphoma Lymphocytic leukemia Multiple myeloma Erythroleukemia Histiocytic sarcoma Solid tumors
Inflammatory Diseases	Necrosis SLE Gastroenteritis Dermatitis Hepatitis Rheumatoid arthritis Hepatitis	Unclassified
Drugs & Toxins	Antimicrobials	Propylthiouracil Warfarin
Vaccines	Controversial	No reports

Garden O, *et al. J Vet Intern Med*, 2019.

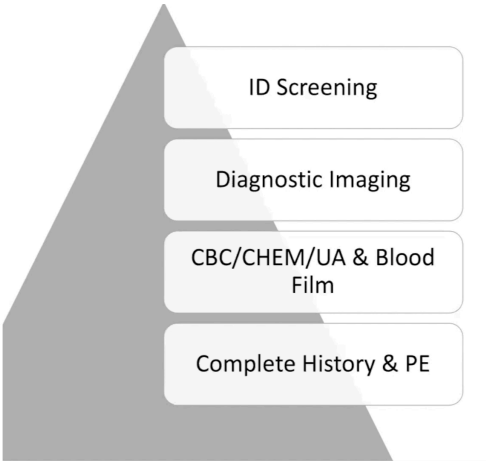


So when we look at these potential secondary or associative triggers, we typically break them down into what? Our four major categories-- infectious disease, cancers, drug reactions, reactions to certain toxins, and infectious inflammatory diseases, and potentially even vaccines.



So it's really important to do a very thorough investigative process for associative causes. Yes, there is a continuum of care, and we're not always going to be able to do it. And an owner's inability to do a complete workup should not negatively affect potential treatment.

But in the ideal, world we do find the associative causes because if there's something that we can identify and that we can treat effectively, we stand a better chance of ultimately treating the IMHA, as well. So I think it's really important to always at least make the recommendation for an associative investigation.



So the foundation of our diagnostic investigation pyramid is always complete history and physical exam. Your next step with Bella was that we evaluated a minimum database-- complete blood count, biochemical profile, urinalysis, blood film. We did some extra things with the blood film.

But we probably need to now continue with this associative investigative process through some form of diagnostic imaging and screening for potential infectious diseases.