

Letter to the Editor

LETTER TO THE EDITOR ON CASE REPORT “TRAUMATIC BLEPHARITIS INCLUDING CUTANEOUS CHANGES WITH A CLINICAL APPEARANCE OF IMMUNE-MEDIATED DISEASE”

Dear Reader,

The scientific Journal Acta Veterinaria Beograd considers articles on all aspects of veterinary science and medicine, including the diagnosis, prevention and treatment of medical conditions of domestic, companion, farm and wild animals, as well as the biomedical processes that underlie their health. The journal is devoted to the advancement and dissemination of scientific knowledge concerning veterinary sciences and related academic disciplines. Acta Veterinaria will support analytical and alternative thinking on the reported manuscript providing educational benefit of readership.

Therefore, attached is Letter to the Editor written by Dr Kenneth L. Abrams, DVM, DACVO, related to the Case Report entitled “Traumatic blepharitis including cutaneous changes with clinical appearance of immune-mediated disease” by Kecova H et al. as well as response written by Dr Sinisa Grozdanic DVM, PhD, Dipl ACVO, Dipl CLOVE (Hon).

Prof. Sanja Aleksić-Kovačević, DVM
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CONCERN ABOUT UNSUBSTANTIATED CASE REPORT

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This letter is to highlight my concerns with the recently published article, “Traumatic blepharitis including cutaneous changes with clinical appearance of immune-mediated disease” by Kecova H et al. First, the title claims that this patient developed the cutaneous lesions due to trauma from the Switchgrass; however, there is no evidence of a traumatic episode resulting in this patient’s lesions disseminated over multiple body areas, mostly near or on the mucocutaneous junctions of the eyelids, nares, lips, and paw pads. It would be unlikely that trauma would affect these multiple specific body areas. Nomenclature is confusing with the authors interchangeably using “traumatic erosive” and “exposure” in the same paragraph of the Introduction.

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Interestingly and concerning is that the second dog that was hunting with the dog in this case report developed remarkably similar lesions. Perhaps this report might have been stronger if that second dog was included in the report, especially since that dog was owned by the same owner. The authors claim that the dog in the case report ‘responded’ to the antibiotic treatment, yet the second dog with similar skin lesions was not treated and the lesions spontaneously resolved in the same amount of time, indicating that the antibiotics did not likely have any positive effect in healing the skin lesions.

One of the weakest aspects of this case report is that many assumptions and conclusions were made without any diagnostic workup beyond a clinical exam of the eye and skin. No skin scrapings for cytology, bacterial cultures, or skin biopsies for histopathology were obtained, yet the authors conclude that this patient did not have allergic, infectious, or immune-mediated disease. Two full page tables are dedicated to extremely detailed lists of differential diagnoses, yet absolutely no diagnostic tests were performed to determine the actual cause of these most specific skin lesions¹.

The very lengthy Discussion section essentially details various diseases that cause mucocutaneous junction skin lesions in the dog and finally concluded in the last short paragraph that “diagnosis was established on the basis of history...after exposure to switchgrass.” These two hunting dogs were released into the field and could have encountered any number of objects or materials that could have resulted in an allergic reaction².

In summary, the authors’ conclusion that both dogs had a traumatic encounter with switchgrass cannot be supported without any diagnostics and the response to antibiotics in the dog presented here is a weak argument given that the second dog that developed the same skin lesions was not treated and those lesions resolved³. Although the season this occurred is not mentioned in the case report, contact sensitivity or inhaled allergic skin reactions can occur during any season throughout the country. Overall, this case report is extremely weak without any evidence of the conclusion that the switchgrass resulted in bilaterally symmetrical mucocutaneous junction skin lesions in two separate dogs

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RESPONSE LETTER

GROZDANIC Sinisa, DVM, PhD, Dipl ACVO, Dipl CLOVE (Hon)

Dear Dr Abrams,

We would like to thank you for your thoughtful criticisms, and interest in reading this case report. As an Editorial Board member (Ophthalmology Section), I would like to state that *Acta Veterinaria* as a journal strongly encourages discussion on all of the published manuscripts, since we strongly believe that the discussion and expression of criticisms before and after the publishing of manuscripts are essential elements for improving the quality of the knowledge in veterinary medicine.

As one of the co-authors of this case report, I can provide more in-depth information regarding the case, which may answer some of the questions that you have raised in your letter. The manuscript went through the regular peer review process and one round of revision, before being finally accepted for publishing.

It is our general “soft” guideline that submitted case reports have a novelty component, but at the same time also to provide a multidisciplinary review (where possible), so readership can have the most benefit from such publication. During this case report preparation, an effort was given to satisfy the multidisciplinary approach by including two ophthalmologists, a dermatologist, and an anatomic pathologist, so a different perspective can be obtained. As you are probably aware, our standard veterinary ophthalmology textbook materials are somewhat lacking in terms of the in-depth description of possible different etiologies for blepharitis, the correlation between mucocutaneous/skin lesions at different parts of the body, and periocular lesions (this is more commonly described in veterinary dermatology textbooks), and possible etiologies and diagnostic techniques which can be utilized to get the answer about the nature of the lesion.

As you have properly pointed, a close collaboration between a dermatologist and an ophthalmologist is essential in these clinical cases, and we have tried to utilize the mechanism of the case report to provide the perspective from a dermatologist and an ophthalmologist, to provide a list of possible differential diagnosis and possible clinical tests that can be utilized by a veterinary practitioner facing such clinical cases, especially in the situation where specialist expertise can't be easily reached, or a referral is not an option due to the financial constraints.

In terms of the more specific questions that you have raised in your letter:

1. Traumatic nature of the injury – as reported in the manuscript, the owner described the development of hemorrhagic lesions during the pheasant hunting trip, which gradually started to dry up. Photos of the hunting mate (younger dog in training with

less hunting time) were presented and showed similar lesions, which were healing much faster, so the owner did not have any concerns and did not present that dog.

As an additional explanation, this dog was used for hunting in Southern Iowa hunting grounds (Davis, Van Buren, Lee – Counties), and pheasant hunting season in Iowa is usually limited to the period of November 1 – January 15th. During that time of year, Iowa is already deep in winter conditions with dead vegetation, frozen streams, frequently frozen major rivers, and present snow cover, so exposure to the traditional environmental allergens or potential water-borne contact toxins/irritants is practically non-existent. As stated in the case report, old switchgrass (especially during winter time) becomes dry and with very sharp edges, and this is the reason why farmers in Iowa tend to destroy it (which was pretty much the case at the Midwest in general), to decrease the risk of getting it mixed with the regular hay due to the risks of mechanical injury. This is one of the reasons why the switchgrass is usually present only in nature preserves and hunting grounds, and it is impossible to find it almost anywhere else where agricultural use of the land is supporting cattle/beef grazing operations. If one is to look and analyze the map of Iowa hunting grounds for the above-mentioned counties, it is easy to notice that this is an extremely poorly populated area with literally no settlements or farms, with the State of Iowa managed vast areas of nature preserve fields and hunting grounds, so the risk of chemical contaminants from farms or human settlements, which could have caused possible contact toxicity is minimal to none:

<https://iowadnr.maps.arcgis.com/apps/webappviewer/index.html?id=f9161b90cddb4fcfb35a96901882a4b7>

Furthermore, hunting grounds have to be safely removed from private properties containing animals and human settlements in order to decrease the risk of accidents and also decrease the issues with the noise ordinances which are established in the majority of urban and semi-urban areas in Iowa.

As described in the case report, lesions were non-pruritic, ruling out the allergic nature of the disease, and if one is to take a close look at the periocular lesions presented in the case report, it is easy to detect that lesions have a more aggressive appearance away from the eyelid margin (expected finding due to the eyelid closure when ocular threat irritation is perceived by the object/grass). Allergic disease, immune-mediated conditions, contact toxicities, or drug-induced toxicities are traditionally affecting the mucocutaneous margins and periocular skin.

2. Response to the antibiotic treatment – as demonstrated in the case report, even 3 days after hunting episodes, observed lesions still had the active presence, so in the lack of consent for additional diagnostics, a decision was made to pursue a systemic antibiotic treatment and prevent the possible development of the bacterial infection of still active lesions. One can speculate, that these lesions would have healed even without the antibiotic treatment, however, it was our clinical judgment that antibiotics was the appropriate and ethical choice in this situation. Just letting lesions heal without any type of treatment, may have resulted in more serious consequences for the patient,

and that was not the risk that any reasonable ophthalmologist would be willing to accept.

3. Lack of diagnostic tests – as stated in the report, complete laboratory evaluation, cytology, microbiology, biopsy, and dermatology consult have been discussed and proposed to the client, however that was declined by the client because the overall general condition of this patient was excellent with a daily improvement in the lesion appearance. The provided estimate for the ophthalmology and dermatology examination, complete laboratory evaluation, bacterial and fungal cultures, brief general anesthesia, biopsy, and histopathology analysis, and medications with e-collar was in \$2,000 range, which was not affordable to the owner. This case report did not try to advertise that the additional diagnostic was not needed, but it just stated the reality that in many instances clients will not accept high costs of diagnostics, and a practitioner needs to utilize a more conservative approach in which much more attention has to be paid to the historical detail, the clinical presentation of the disease, and clinical symptoms (which we have tried to summarize in Tables 1 and 2) to get to the appropriate diagnosis with less diagnostic means and dramatically less expense.

4. As far as the weakness of the clinical report goes, the peer-review process passed the initial judgment upon this issue, and ultimately it is up to readers to decide whether they will find this information useful or not. I can personally state, that Table 1, Table 2, and Figure 3 have been popular reading for almost 30 ophthalmology residents and specialists from five different continents who regularly participate in our weekly journal club/textbook rounds, and had a chance to see the early draft of the case report and provide criticisms almost year ago. Some of the participants (including myself) have these tables printed as a quick access material when dealing with patients with periocular lesions as a quick reminder on possible etiologies and possibly diagnostic tests to consider when facing these patients.

Hope this addresses your concerns.

Just as a reminder, the Letter has to have an informative and educational value, has to provide a valid and alternative explanation for a different view on manuscript findings which has to be supported by references. I would encourage you that in your letter you include the expertise of a dermatologist(s) if she/he/they have similar or different concerns regarding the facts and findings stated in the case report, considering the multispecialty nature of the case report. The negative criticism which is non-constructive, and which may be perceived as an emotional grievance and not an objective clinical/scientific analysis of the presented material is unacceptable.