Refractory Discoid Lupus

Discoid lupus erythematosus (DLE) in dogs can present with facial lesions or as a generalized variant. In this case study, a 6-year-old dog had a 2-year history of progressive pruritic skin lesions. Skin biopsy was compatible with cutaneous lupus erythematosus. Treatment with doxycycline, niacinamide, and prednisone was started. After 4 months, the dog had not improved and was referred to a veterinary dermatologist. The diagnosis of cutaneous lupus erythematosus was confirmed via skin biopsy, direct immunofluorescence, and routine laboratory testing (complete blood count, urinalysis, serum chemistry panel, and antinuclear antibody testing); coexistent systemic lupus erythematosus was ruled out. Except for the skin lesions, the dog was otherwise healthy. Treatment with dexamethasone and oral cyclosporine was initiated. As insufficient clinical response was noted after 1 month, the dexamethasone was discontinued and ketoconazole treatment started concurrently with cyclosporine. Within 4 months, pruritus and erythema resolved. The dog was considered to be in clinical remission 2 months later. At the time of publication, the dog's clinical lesions were being maintained with oral cyclosporine and ketoconazole every 3 days.

Commentary

For clinicians who encounter this rare condition, cyclosporine represents an option that has not been reported previously. It is important to stress that the localized form of discoid lupus is far more common than the generalized form. Typically, the localized form does not require oral systemic therapy and can often be maintained effectively with topical steroids or tacrolimus. For those rare cases of generalized discoid lupus, cyclosporine is an option when doxycycline therapy fails. It is also important to stress that in dogs with generalized discoid lupus or cutaneous lupus, clinicians should rule out systemic lupus through further testing including blood counts, serum chemistry panel, urinalysis, and anti-nuclear antigen serology. *—William Oldenhoff, DVM, DACVD*

Source

Banovic F, Olivry T, Linder KE. Ciclosporin therapy for canine generalized discoid lupus erythematosus refractory to doxycycline and niacinamide. *Vet Dermatol*. 2014;25(5):483-e79.

Transfusion Reactions in Dogs

WSAVA Global Veterinary Community This retrospective study of 935 transfusion events in 558 dogs sought to evaluate the effect of premedication with antihistamines or corticosteroids on transfusion reactions (TRs) within 24 hours after blood transfusions in dogs. Authors also reported on other factors associated with acute TRs. There were 144 acute TRs in 136 dogs. The most common TRs reported were fever alone (53%) and vomiting alone (18%). TRs were not associated with age, sex, weight, or premedication. Type of blood product used was significantly associated with TR, with packed red blood cells most likely associated and plasma least likely. There were significantly fewer reactions associated with transfusions administered during the perioperative period. The presence of immune-mediated disease in patients receiving transfusion was significantly associated with TRs. Six dogs died as a result of TRs (4% of reactions). Dyspnea, noted in 10 transfusions (7% of reactions), was seen in all reactions that resulted in death. Tachycardia and acute hemolysis were each noted in 3% of cases. Allergic reactions, which comprised 9% of cases, were characterized by facial swelling, urticaria, or pruritus. Overall TR occurrence was not altered with premedication, but diphenhydramine decreased acute allergic reaction incidences. Steroid premedication was not of benefit in TRs but was associated with an increased risk for dyspnea. This study reported the first possible cases of canine transfusion-related acute lung injury (TRALI, the leading cause of transfusion-associated mortality in humans) in the literature.

Global Commentary

With the advancement of transfusion medicine in veterinary medicine, we tend to forget 2 important facts: first, transfusions are still associated with serious side effects; second, our methods of preventing these are poorly effective and have not changed much in the past decades. This study reminds us that TR prevalence is considerable, and it clearly shows that what we are doing to prevent TRs is not enough and is rarely effective. The authors parallel their results with what has been published in human medicine and point out, correctly, future directions for research. As with any excellent paper, after reading this study, one is left with many questions. For example, as found in humans, would age of the blood products be related to TR incidence? And what about late TRs—what kind of associations could we find? These and many other questions should be addressed in future prospective studies. Lastly, the authors are to be applauded because they provided the first evidence that TRALI exists in dogs. Working in the critical care environment, I was always puzzled by the fact that TRALI has never been reported before, especially after having cases that shared similar clinical and radiological signs to those reported in humans.—*Nuno Felix, DVM, MS*

Source

Bruce JA, Kriese-Anderson L, Bruce AM, Pittman JR. Effect of premedication and other factors on the occurrence of acute transfusion reactions in dogs. *JVECC*. 2015;25(5):620-630.