# Ischemic Dermatopathy in Dogs

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### In the Literature

Backel KA, Bradley CW, Cain CL, Morris DO, Goldschmidt KH, Mauldin EA. Canine ischaemic dermatopathy: a retrospective study of 177 cases (2005-2016). *Vet Dermatol.* 2019;30(5):403-e122.

## FROM THE PAGE ...

Ischemic dermatopathy can refer to multiple syndromes that share common features but have different etiologies. Few recent studies have focused on nonfamilial variants of ischemic dermatopathy or cases in which a vaccine trigger has not been identified. Few case reports have shown improvement after administration of vitamin E combined with pentoxifylline ± prednisone or with oclacitinib.[1,2]

This retrospective study reviewed 177 cases of canine ischemic dermatopathy, excluding familial dermatomyositis; 93 cases had complete medical records. Results showed that small breeds (weighing <22 lb [10 kg]) represented most cases; Chihuahuas, toy/miniature poodles, Maltese, and Yorkshire and Jack Russell terriers were significantly overrepresented.

Of the 93 dogs with complete records, alopecia was the most common lesion, followed by crusting, scale, erythema, erosions/ulcers, and hyperpigmentation; pruritus was noted in one-third of the dogs. The median number of lesion sites was 4; however, some dogs had a single lesion. Most dogs with a single lesion had been vaccinated at that site; those with lesions not at a vaccine site were older and had greater body weights. Lesions were found most commonly on the pinnae, vaccination sites, and the periocular region/face. The most frequently reported systemic signs were lethargy, fever, inappetence, and lameness. In dogs receiving concurrent medication, there was no clinical suspicion that medication triggered the disease. Dogs having only pinnal lesions or increased systemic signs required more medications/potent immunosuppressive agents for treatment.

Pentoxifylline was the most commonly used medication, followed by steroids, vitamin E, and cyclosporine. The use of steroids was associated with a worse outcome and prognosis. Overall remission was generally achieved without significant changes in medication or combination therapy. Half of the cases had a good outcome and could be maintained on medication long-term. Factors associated with a worse prognosis included a weight <22 lb (10 kg), increased age, increased number of lesion sites, presence of systemic signs, and lesions at specific sites, including the pinnae and paw pads.

More than half of the cases in this study were likely not induced by vaccination, highlighting the need to investigate other underlying causes of ischemic dermatopathy. Previous reports show that vaccine-induced disease is seen primarily in small-breed dogs, but results in this study contraindicate those prior results. Although vaccines appear to play a role in some cases, generalized idiopathic ischemic dermatopathy more likely encompasses a diverse group of diseases, with variations in severity and unidentified but wide-ranging triggers.

## . . . TO YOUR PATIENTS

Key pearls to put into practice:

1. Small-breed dogs weighing <22 lb (10 kg) are typically overrepresented in cases of ischemic dermatopathy; thus, this disease should be on the differential list for patients displaying appropriate clinical signs.
2. More than half of the cases of ischemic dermatopathy in this study were likely not induced by vaccination; thus, a specific trigger for this disease may not be apparent from a patient's history.
3. Overall remission was achieved without the use of significant numbers of medications. Approximately half of the cases had good outcomes and could be maintained on medication long-term.

## References


1. Vitale CB, Gross TL, Magro CM. Vaccine-induced ischemic dermatopathy in the dog. *Vet Dermatol*. 1999;10(2):131-142.
2. Pulsoni D, Freire A, Ferreira DR. Juvenile-onset ischaemic dermatopathy in two dogs treated with oclacitinib. *Vet Dermatol*. 2018;29:371.




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