

## SUCCESSFUL TREATMENT OF IDIOPATHIC SEBACEOUS ADENITIS IN A LIONHEAD RABBIT

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### Abstract

A 15-month-old, ovariohysterectomized female Lionhead rabbit was presented with generalized chronic exfoliative dermatitis and patchy alopecia. General physical examination revealed no abnormalities apart from a body condition score of 4 of 9. Ectoparasitic infestation, dermatophytosis, *Malassezia* dermatitis, epitheliotropic lymphoma, thymoma-associated exfoliative dermatitis, and autoimmune hepatitis-associated exfoliative dermatitis were excluded on the basis of skin scrapings, fungal culture, cutaneous histopathology, thoracic radiography, and the results of hematologic and biochemical analyses. Histopathology of the skin showed orthokeratotic hyperkeratosis, absence of sebaceous glands and mural lymphocytic folliculitis, consistent with sebaceous adenitis. The extent and severity of the skin lesions were scored by the Rabbit Dermatitis Extent and Severity Index adapted from the recently published Canine Atopic Dermatitis Extent and Severity Index–03. Once-daily oral treatment with 5 mg/kg of ciclosporin A dissolved in an equal amount of a medium-chain triglyceride solution (Miglyol 812; Bufa, Uitgeest, The Netherlands) was initiated, but the response to this was poor. Therefore, while maintaining the oral treatment, topical treatment with phytosphingosine products was given. The rabbit's coat was clipped and a phytosphingosine 0.2% microemulsion spray (daily), a phytosphingosine 0.1% shampoo (weekly), and a phytosphingosine 1% spot-on treatment (weekly) were applied. Nine months later, there had been significant hair regrowth on previously hairless areas and the Rabbit Dermatitis Extent and Severity Index confirmed the marked improvement with a 91% reduction in the original score. Serum ciclosporin concentrations were undetectable throughout the treatment period. Copyright 2012 Elsevier Inc. All rights reserved.

**Key words:** ciclosporin; phytosphingosine; rabbit; sebaceous adenitis; treatment

**I**diopathic sebaceous adenitis (ISA) is an inflammatory disease of the sebaceous glands, resulting in their destruction.<sup>1</sup> ISA is primarily diagnosed in dogs but has also been reported in rabbits, cats, a horse, and humans.<sup>2-6</sup> Currently, ISA is believed to be an immune-mediated disease, but the pathogenesis is not fully understood.<sup>7</sup> In rabbits, physical signs may include a focal to generalized, dry, brittle hair coat; scale; follicular casts; and alopecia. Affected animals are also predisposed to secondary bacterial pyoderma.<sup>1,7</sup> Compatible histologic findings include inflammation and a reduction in numbers or a total absence of sebaceous glands in combination with a mural lymphocytic folliculitis. These features are comparable with those observed with canine ISA.<sup>8,9</sup>

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**FIGURE 1.** (a) Hyperkeratotic crust affecting the lower left eyelid. (b) Hyperkeratotic crusts and fronds affecting the dorsal neck. Small white scales are also visible on the erythematous and alopecic skin. (c) The rabbit 12 weeks later during a whole body clip. Multifocal, circumscribed, hyperkeratotic crusts are visible. (d) Close view of the rabbit's dorsal neck and thorax from Figure 1c. (e) The rabbit 9 months after the treatment. (f) Close-up view of the dorsal thorax. The remaining adherent white scales and yellowish casts attached to the growing hair should be noted. (g) Photomicrograph of skin from the dorsal thorax. One should note the perifollicular lymphocytic folliculitis (hematoxylin-eosin stain, original magnification  $\times 40$ ). (h) Photomicrograph of skin from the dorsal thorax showing lymphocytic inflammation of a sebaceous gland (hematoxylin-eosin stain, original magnification  $\times 400$ ).

amination. However, there was no clinical improvement after 14 days of antibacterial treatment, and because a definitive diagnosis of ISA had been determined, treatment with CsA (Neoral; Novartis Pharmaceuticals Ltd., Surrey, UK) was instituted at a dosage of 5 mg/kg adminis-

tered orally once every 24 hours dissolved in an equal amount of a triglyceride solution (Miglyol 812; Bufa, Uitgeest, The Netherlands) as reported in an earlier case.<sup>16</sup> Monitoring of biochemical parameters was recommended to the referring veterinary surgeon.