Climbazole Shampoo

This study evaluated the antifungal efficacy of a 2% climbazole shampoo against 3 Malassezia spp strains using a modified hair strand test. Healthy research dogs (n = 6) were bathed with either a 2% climbazole shampoo or a physiologic hygienic shampoo. Hair strands (ie, clipped hairs) were collected before and after treatment at several predetermined time points for 30 days posttreatment. At day 30, the climbazole-treated dogs were bathed with the physiologic hygienic shampoo, and further hair strands were collected at predetermined time points over an additional 25 days. Hairs were placed on Sabouraud dextrose agar plates streaked with Malassezia pachydermatis, and inhibition zones were measured.

Antifungal activity, noted within 5 hours of application of the 2% climbazole shampoo, was sustained for 30 days. The maximum inhibition zone was observed on day 4. No zones of inhibition were noted around hairs from dogs bathed with the physiologic hygienic shampoo. On day 30, the climbazole-treated dogs were bathed with the physiologic cleansing shampoo, and there was a temporary increase in zones of inhibition around the hairs. This increase may have been caused by release of lipophilic climbazole trapped in skin appendages. All dogs tolerated the climbazole product; no adverse events were reported. The authors concluded that the modified hair strand technique is a useful assay of the bioavailability of the active ingredients in topical formulations and that there is persistent antifungal activity of dog hairs treated once with 2% climbazole shampoo.

Commentary
The major take-home is that climbazole is yet another option for treating Malassezia spp overgrowth, which can complicate many canine skin diseases and magnify pruritus. Although this study was done in normal dogs with healthy hair coats, it is important to note that the shampoo bound to hairs and provided some residual activity. In my clinical experience, clients report the best therapeutic benefit when dogs are first bathed with a cleansing shampoo then washed with a medicated shampoo. The first bathing removes accumulated debris from the skin and hair; this allows the medicated shampoo better access to target areas (ie, hair shafts and skin surface). Clients should dilute shampoos before application to enhance even distribution of the solution, facilitate even lathering and rinsing, and keep shampoo costs reasonable.—Karen Moriello, DVM, DACVD

Source