a fórmula

CLIMBAZOL

Anticaspa ideal para cabelos saudáveis

Estudos

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a fórmula

CLIMBAZOL

Anticaspa ideal para cabelos saudáveis

DESCRIÇÃO

Climbazol é um antifúngico pertencente a classe dos antimicóticos imidazólicos.

MECANISMO DE AÇÃO

Climbazol age especificamente sobre o fungo *Malassezia furfur* (principal agente etiológico da caspa) inibindo a biossíntese do ergosterol sem atingir a microbiota do couro cabeludo saudável, diferente dos outros produtos anticaspas, além de inativar a 14 alfa-demetilase dependente do citocromo P450, resultando na inibição da síntese do lanesterol, alterando consequentemente a estrutura da membrana celular do fungo**.**
Climbazol permite criar um produto final de qualidade transparente, sem formação de complexos coloridos quando em contato com íons metálicos, além de possuir excelente estabilidade na presença de luz e calor.

INDICAÇÕES

- ✓ Anticaspa;
- ✓ Dermatite seborreica;
- ✓ Pitiríase Versicolor.

DOSE USUAL

Recomendação tópica de 0,1 a 2,0, % de **Climbazol** três vezes por semana.
Obs: recomenda-se 0,1 a 0,5% de **Climbazol** em fórmulas sem necessidade de enxágue e concentrações de 0,5 a 2% de **Climbazol** em fórmulas que necessitam de enxágue após o uso.

SUGESTÕES DE FÓRMULAS

Climbazol..... 2%
Ácido salicílico.....5%
Desonida.....0,1%
Loção capilar qsp.....100ml

Modo de uso: aplicar nos cabelos 3 vezes na semana, massageando o couro cabeludo por 3 minutos, enxaguando em seguida.
Indicação: anticaspa.

Climbazol.....0,5%
Piritionato de zinco.....1%
Base shampoo qsp..... 100ml

Modo de uso: aplicar nos cabelos 3 vezes na semana, massageando o couro cabeludo, enxaguando em seguida.
Indicação: coceiras e caspa no couro cabeludo.

Climbazol.....0,5%
Piroctona olamina.....1%
Creme qsp..... 30 g

Modo de uso: aplicar nas áreas afetadas por 2 noites na semana durante 2 meses.
Indicação: dermatite seborreica; pitiríase versicolor.

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CLIMBAZOL

ESTUDOS CLÍNICOS

Climbazole increases expression of cornified envelope proteins in primary keratinocytes.

OBJECTIVE: Dandruff is a troubling consumer problem characterized by flaking and pruritus of the scalp and is considered a multifactorial condition with sebum, individual susceptibility and the fungus Malassezia all thought to play a part. The condition is commonly treated with shampoo products containing antifungal ingredients such as zinc pyrithione and climbazole. It is hypothesized that these ingredients may be delivering additional scalp skin benefits besides their antifungal activity helping to relieve dandruff effectively. The objective of this study was to evaluate the anti-dandruff ingredient climbazole for potential skin benefits using genomics and in vitro assays. METHODS: Microarray analysis was performed to profile gene expression changes in climbazole-treated primary human keratinocyte cells. Results were independently validated using qPCR and analysis of protein expression using ELISA and immunocytochemistry. RESULTS: Microarray analysis of climbazole-treated keratinocytes showed statistically significant expression changes in genes associated with the gene ontology groups encompassing epidermal differentiation, keratinization, cholesterol biosynthesis and immune response. Upregulated genes included a number encoding cornified envelope proteins such as group 3 late-cornified envelope proteins, LCE3 and group 2 small-proline-rich proteins, SPRR2. Protein analysis studies of climbazole-treated primary keratinocytes using ELISA and immunocytochemistry were able to demonstrate that the increase in gene transcripts translated into increased protein expression of these cornified envelope markers. CONCLUSION: Climbazole treatment of primary keratinocytes results in an upregulation in expression of a number of genes including those encoding proteins involved in cornified envelope formation with further studies demonstrating this did translate into increased protein expression. A climbazole-driven increase in cornified envelope proteins may improve the scalp skin barrier, which is known to be weaker in dandruff. These studies suggest climbazole, besides its antifungal activity, is delivering positive skin benefits helping to relive dandruff symptoms effectively.

Efficacy of a 2% climbazole shampoo for reducing *Malassezia* population sizes on the skin of naturally infected dogs.

OBJECTIVE OF THE STUDY: Shampoo therapy is often recommended for the control of Malassezia overgrowth in dogs. The aim of this study was to evaluate the in vivo activity of a 2% climbazole shampoo against Malassezia pachydermatis yeasts in naturally infected dogs. ANIMALS: Eleven research colony Beagles were used. MATERIALS AND METHODS: The dogs were distributed randomly into two groups: group A (n=6) and group B (n=5). Group A dogs were washed with a 2% climbazole shampoo, while group B dogs were treated with a physiological shampoo base. The shampoos were applied once weekly for two weeks. The population size of Malassezia yeasts on skin was determined by fungal culture through modified Dixon's medium contact plates pressed on left concave pinna, axillae, groins, perianal area before and after shampoo application. Samples collected were compared by Wilcoxon rank sum test. RESULTS: Samples collected after 2% climbazole shampoo application showed a significant and rapid reduction of Malassezia population sizes. One hour after the first climbazole shampoo application, Malassezia reduction was already statistically significant and 15 days after the second climbazole shampoo, Malassezia population sizes were still significantly decreased. No significant reduction of Malassezia population sizes was observed in group B dogs. CONCLUSION: The application of a 2% climbazole shampoo significantly reduced Malassezia population sizes on the skin of naturally infected dogs. Application of 2% climbazole shampoo may be useful for the control of Malassezia overgrowth and it may be also proposed as prevention when recurrences are frequent.

Efficacy and Safety of Cream Containing Climbazole/Piroctone Olamine for Facial Seborrheic Dermatitis: A Single-Center, Open-Label Split-Face Clinical Study.

BACKGROUND: Seborrheic dermatitis (SD) is a multifactorial disease; Malassezia species play an important role in its pathogenesis. OBJECTIVE: We aimed to determine whether a cream containing climbazole/piroctone olamine (C/P cream), antifungal agents with expected efficacy against Malassezia species, could improve SD symptoms.
METHODS: We instructed 24 patients with mild-to-moderate SD to apply the C/P cream and emollient cream on the right and left sides of the face, respectively, every morning and evening for 4 weeks. The casual sebum level (measured with Sebumeter®;

Courage & Khazaka Electronic GmbH, Germany) and the extent of erythema (measured with Mexameter®; Courage & Khazaka Electronic GmbH) on the face were measured at baseline and after 4 weeks. The minimal inhibitory concentration (MIC) was determined to demonstrate the antifungal activity of the C/P cream. RESULTS: The casual sebum level and erythema were measured at week 4, and the median values demonstrated a quantitative improvement on the C/P cream-treated right side of the face compared to the emollient cream-treated left side. For the C/P cream, the MICs were 0.625, 5, 0.625, and 2.5 mg/ml for Malassezia restricta, M. globosa, M. sympodialis, and M. slooffiae, respectively. CONCLUSION: Based on the reduced casual sebum level and extent of erythema, the antifungal activity of C/P cream against Malassezia species seems useful for the treatment of mild to moderate SD.

Efficacy and tolerability of a spray product containing hydroxypropyl chitosan, Climbazole and Piroctone olamine, applied twice weekly for the treatment of the Pitiriasis Versicolor.

BACKGROUND: The aim of this study was to demonstrate the effectiveness of a product containing hydroxypropyl chitosan, Climbazole and Piroctone olamine, by monitoring the adherence and the penetration of the molecules in the skin. Confocal microscopy led us to show the persistence of the active compound for a long time in the stratum corneum, thanks to the presence of hydroxypropyl chitosan. This evidence suggests a new protocol of application (a biweekly application, rather than daily). METHODS: Thirty patients (17 Males, 13 Females; average age 20,8) were selected from 3 dermatological centers: the Dermatological Clinic of the University of Naples "Federico II"; the Dermatological outpatient clinic of the private hospital "Villa Nigrisoli" of Bologna; the Section of Cutaneous Appendages of the European Dermatological Institute of Milan. The study protocol entailed application of a topical spray product 2 evenings a week for 2 months. Confocal microscopy, dermoscopy and photographic documentation were performed at the moment of diagnosis (T0), 12 hours after the first application (T1), after 7 days (T2), after 1 month (T3) and after 2 months (T4). RESULTS: The improvements of clinical symptoms were documentated by dermoscopy and digital photos. Confocal microscopy shows the persistence of the product in the stratum corneum, at different times of observations. CONCLUSION: A biweekly application of a product containing hydroxypropyl chitosan, Climbazole and Piroctone olamine shows a clinical significative improvement, evaluated through digital photographs and dermoscopic images, with complete resolution at T4 in 100% of cases.

Therapeutic efficacy of anti-dandruff shampoos: a randomized clinical trial comparing products based on potentiated zinc pyrithione and zinc pyrithione/climbazole.

OBJECTIVES: Dandruff is a chronic, relapsing scalp condition that negatively impacts the quality of life of sufferers. Regular use of anti-fungal shampoos represents a proven therapeutic strategy to improve the most common symptoms of flakes and itch. Two recent approaches for enhancing the efficacy of anti-fungal shampoos are maximizing bio-availability of the active material or the addition of a second active material. Our aim is to compare the therapeutic efficacy of these two approaches - maximization of bio-availability of the zinc pyrithione (ZPT) active material or the combination of ZPT with a secondary active material. METHODS: The anti-fungal potency of shampoos representing each of these approaches was evaluated in vitro using a standard microbiology method. Spatial delivery of ZPT particles in the follicular infundibulum was assessed in vivo using a novel confocal microscopy methodology. Clinical efficacy was assessed in a randomized, double-blind trial involving 620 male and female subjects using scalp flaking and epidermal histamine level as endpoints. RESULTS: The shampoo formula with maximized ZPT bio-availability known as the Potentiated ZPT formula exhibited greater anti-fungal potency than the Dual Active shampoo containing both ZPT and climbazole. The Potentiated ZPT formula also delivered more ZPT to the lower infundibulum than the Dual Active shampoo. A 4-week treatment with the Potentiated ZPT formula resulted in superior clinical efficacy compared with the Dual Active product at all 4 weekly time points for both flaking and epidermal histamine endpoints. CONCLUSION: These results highlight the critical role that the shampoo vehicle plays in realizing full potency of active materials. By optimizing the delivery vehicle, the enhanced anti-fungal potency and the maximized spatial delivery of active materials result in greater symptomatic improvement than a product with two active materials. The therapeutic efficacy of a product based on a complex delivery vehicle such as a shampoo must be considered from a full-product perspective rather than just the active system as the non-active components of the composition will often play a significant role in the overall product pharmacology and resultant efficacy.

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