MICROSILVER BG™
Prata no tratamento natural e orgânico

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DESCRIÇÃO
MicroSilver BG™ é prata metálica pura (*Argentum metallicum*) micronizada de origem natural para ser utilizado em produtos para Personal Care, entre outros.

MECANISMO DE AÇÃO
O MicroSilver BG™ tem como ação a ativação contra um amplo espectro de microrganismos, normalizando a flora cutânea e mantendo um equilíbrio bacteriano para uma pele saudável, prevenindo a inflamação causada por microrganismos patogênicos. O MicroSilver BG™ não possui uma ação direta sobre a cicatrização, ele combate a infecção e melhora o processo de cicatrização natural da pele.

INDICAÇÕES
- Acnes, psoriase, dermatites atópica e seborreica;
- Cremes depilatórios;
- Cremes dentais (antimicrobianos);
- Desodorantes, cremes para os pés (contra bactérias causadoras de odores);
- Produtos de limpeza (sabonetes, shampoos, etc...).

DOSE USUAL
Recomendação de 0,1 – 0,3% de Micro Silver BG™, corpo/face. Recomendação de 0,1 – 0,2% de Micro Silver BG™, shampoos/tratamento do couro cabeludo. Recomendação de 0,2 – 0,4% de Micro Silver BG™, produtos para os pés; e 0,05 – 0,1% de Micro Silver BG™, produtos labiais.

SUGESTÕES DE FÓRMULAS

<table>
<thead>
<tr>
<th>Creme para tratamento dos sintomas da Psoriase</th>
<th>Creme para os pés Anti Frieiras</th>
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</thead>
<tbody>
<tr>
<td>Microsilver BG™........................................ 0,1%</td>
<td>Microsilver BG™........................................ 0,2%</td>
</tr>
<tr>
<td>Ureia...................................................... 10%</td>
<td>Creme com silicone Qsp..................... 30g</td>
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<tr>
<td>Creme hidratante Qsp.................................... 30g</td>
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</tbody>
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**Modo de Uso:** Aplicar 2 vezes ao dia nas regiões afetadas.

**Modo de Uso:** Aplicar 1 vez ao dia após o banho, durante 10 dias.

PRINCIPAIS REFERÊNCIAS


The objective of this prospective, dermatologically controlled study, which was conducted in 20 patients at the Vitaklinik in Kiel, was to investigate the efficacy of a nurturing cosmetic cream containing 0.1% MicroSilver BG™ from BioEpiderm GmbH, Nürnberg, Germany in patients with mild to moderate atopic dermatitis. The primary endpoint was the change in the local SCORAD on the arms after four weeks of treatment. The local SCORAD includes five symptoms – erythema, edema and papules, oozing and crusting, excoriation, and lichenification - in the evaluation. The intensity of the individual symptoms is evaluated on a scale from 0 to 3. Secondary endpoints were the change in the SCORAD index after four weeks of treatment, qualitative detection of Staphylococcus aureus colonisation on the arms as well as an evaluation of the product and its use from the patient perspective. The patients applied the cream containing 0.1% MicroSilver BG™ themselves twice daily in the morning and evening for four weeks. The first follow-up examination took place after two weeks of treatment and the second and last follow-up examination after four weeks of treatment. The mean local SCORAD index was 8.65 at the start of the study. After two weeks of treatment, it had fallen to 6.05 and after four weeks of treatment it had fallen statistically significantly to 36.32 and after four weeks of treatment to 24.85 (reduction: 53.45%). The mean total score for the individual product properties was between 1.7 and 2.9 and the mean total score for the cream was 2.5. 75.0% of patients stated that they would like to continue to use the 0.1% MicroSilver BG™ cream. No patients experienced Staphylococcus aureus colonisation during the four weeks of treatment. Atopic dermatitis severity and Staphylococcus aureus colonisation are closely correlated. Products with an antimicrobial principle of action – like the 0.1% MicroSilver BG™ cream – are therefore a useful approach to the nurturing treatment of atopic skin conditions.

Adjuvant skin care with a Micro-silver containing emollient with dms-lipid-structure: efficacy and cosmetical acceptance in atopic eczema and psoriasis

102 patients of the PsoriSol Dermatological Clinic (55% with atopic dermatitis, 33% with psoriasis, 12% with other inflammatory skin diseases) were enrolled into the study during in-patient conditions. The aim of the study was to evaluate efficacy, tolerance and cosmetic acceptance of the Microsilver containing emollients in this special selection of patients with severe symptomatic conditions. The course of the study there was a significant improvement of key symptoms like pruritus, dryness, erythema, scaling and excoriation. In addition, in 93% of the cases the application of corticosteroids could be discontinued. In the patients assessment the tolerance was classified very good. The cosmetical acceptance was also very good. Most of the patients wanted to continue their treatment with the tested emollients.

An in vitro biological and anti-bacterial study on a sol–gel derived silver-incorporated bioglass system

Objectives The purpose of this study was to evaluate the in vitro antibacterial and biological activity of silver-incorporated bioactive glass system SiO$_2$–CaO–P$_2$O$_5$–Ag$_2$O (AgBG). The bacteriostatic and bactericidal properties of this new quaternary glass system along with the ternary sol–gel glass system SiO$_2$–CaO–P$_2$O$_5$ (BG) have been studied using Escherichia coli as a test micro-organism. The AGBG system thus appears to be a promising material for dental applications, since similar effects might be produced on a film of bacteria and mucous that grows on the teeth. The SiO$_2$–CaO–P$_2$O$_5$–Ag$_2$O and SiO$_2$–CaO–P$_2$O$_5$ glass systems were synthesized by the sol–gel technique and characterized for their physico-chemical properties. The antibacterial activity and biological properties were evaluated by determining the minimum inhibitory concentrations (MICs). Release of Ag$^+$ into the culture medium was measured by inductively coupled plasma (ICP) analysis. Results The in vitro antibacterial action of the SiO$_2$–CaO–P$_2$O$_5$–Ag$_2$O was compared with that of its ternary counterpart glass system. The concentrations of Ag-bioglass, in the range of 0.02–0.20 mg of Ag-bioglass per millilitre of culture medium, were found to inhibit the growth of these bacteria. The Ag-bioglass not only acts bacteriostatically but also elicited a rapid bactericidal action. A complete bactericidal effect was elicited in the early stages of the incubation at Ag-bioglass concentration of 20 mg/ml and the...
ternary glass system had no effect on bacterial growth or viability. The antibacterial action of Ag-bioglass was exclusively attributed to the leaching of Ag\(^+\) ions from the glass matrix. Significance One of the major advantages of incorporating silver ions into a gel glass system is that the porous glass matrix can allow for controlled sustained delivery of the antibacterial agent to dental material, used even under anaerobic conditions such as deep in the periodontal pocket. This glass system also provides long-term action required for systems which are constantly at risk of microbial contamination.

Investigation on the Antibacterial Micro-Porous Titanium with Silver Nano-Particles

Micro-porous titanium is coated with silver nanoparticles by using a simple chemical reduction method that exhibits excellent antibacterial ability. Scanning electron microscopy (SEM) shows that the silver nanoparticles with average sizes of about 100 nm are formed homogeneously on the micro-porous titanium surface. After the micro-porous Ti coated with silver nano particles is treated by heating, the average size of the silver nano particles is slightly increased, but the nano particles are more uniformly dispersed on the surface of the micro-porous titanium. X-ray diffraction (XRD) indicates that those nanoparticles are metallic silver produced on the micro-porous titanium surface. The samples of micro-porous titanium coated with silver nanoparticles inhibit the growth of Escherichia coli. Our results show that the electrical double layer of the samples play an important role in the antibiosis and this study opens a new window for antibacterial mechanism which may be suitable for the other antibacterial metallic materials.

REFERÊNCIAS


