

A Quick Guide for Topical Treatment for Psoriasis

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ABSTRACT

Psoriasis, a chronic inflammatory skin disorder, presents a therapeutic challenge due to its diverse manifestations and impact on patients' lives. This review delves into the intricacies of topical agents used in managing psoriasis, encompassing corticosteroids, vitamin D analogs, retinoids, calcineurin inhibitors, and unconventional treatments like coal tar and salicylic acid. Each agent's potency, application, and considerations for different age groups are discussed, providing clinicians with a comprehensive guide for treatment selection. The multifaceted nature of psoriasis requires tailored approaches, and understanding the nuances of these topical therapies is crucial for optimizing outcomes. Ongoing research promises further advancements in psoriasis management, holding potential for more personalized and effective interventions.

KEYWORDS: Psoriasis, topical agents, corticosteroids, vitamin D analogs, retinoids, calcineurin inhibitors, coal tar, salicylic acid, inflammatory skin disorder, chronic skin disease, treatment modalities, personalized medicine.

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INTRODUCTION

Psoriasis, a chronic skin disorder characterized by the excessive proliferation of keratinocytes, gives rise to the formation of thickened scaly plaques, accompanied by itching and inflammatory changes within the epidermis and dermis. Importantly, psoriasis is not confined to a mere cutaneous ailment; it manifests as a multisystem inflammatory disorder entwined with various comorbidities.

The predominant manifestation, plaque psoriasis, typically presents with symmetrically distributed plaques on the scalp, extensor sides of elbows, knees, and the back, although it can emerge anywhere on the skin. In more severe instances, such as erythrodermic or generalized pustular psoriasis, patients may experience systemic symptoms, including fever and compromised overall health, occasionally requiring hospitalization.

The diagnosis of psoriasis relies heavily on a clinical approach, involving a thorough examination of the patient's history and physical assessment of lesions. Notably, there are no specific laboratory tests designed for diagnosing psoriatic arthritis, although various screening questionnaires have been developed for this purpose.

Treatment strategies are tailored based on disease severity, existing comorbidities, patient preferences (including cost and convenience), efficacy of treatments, and the evaluation

of individual patient responses. Topical therapies suffice for mild to moderate psoriasis, with corticosteroids serving as a primary option, despite the inherent challenge of completely eradicating plaques. In cases of moderate to severe psoriasis, systemic therapies, such as acitretin, methotrexate, cyclosporine, apremilast, and biologic agents, become crucial components of the treatment plan.

Beyond its physical implications, psoriasis exerts a significant emotional toll, affecting self-image and triggering self-consciousness and concealment. Understanding the psychosocial impact is paramount in providing holistic care, acknowledging the potential for emotional disability and its severe implications, including an increased risk of suicidality. Consequently, healthcare providers must be vigilant in addressing both the physical and emotional aspects of psoriasis to ensure comprehensive and effective management.

TOPICAL AGENTS

Corticosteroids:

Corticosteroids are a cornerstone in psoriasis treatment. Hydrocortisone, a low-potency option, provides a gentle approach suitable for various age groups. Triamcinolone, a moderate-potency corticosteroid, offers flexibility with ointment and cream formulations, adapting to the specific needs of children and adults. Fluocinonide, a high-potency

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corticosteroid, addresses more severe cases, with an ultrahigh-potency cream designed for adolescents and adults. These agents work by suppressing inflammation, thereby alleviating symptoms.

Vitamin D Analogs:

Calcipotriene and calcitriol, vitamin D analogs, provide an alternative avenue. Their use involves regulating skin cell growth and reducing inflammation. Calcipotriene is particularly versatile, catering to children, adolescents, and adults. Calcitriol, while also versatile, requires adjusted dosages based on age groups. Incorporating these agents adds a multifaceted approach to psoriasis management.

Tazarotene:

Tazarotene, a topical retinoid, introduces a unique mechanism by normalizing cell growth and reducing inflammation. Administered in gel form, it offers targeted treatment. The dosage, starting at 0.05% and potentially increasing to 0.1%, depends on the age group and tolerance. Tazarotene serves as a valuable option for those seeking alternatives to corticosteroids.

Calcineurin Inhibitors:

Pimecrolimus and tacrolimus, calcineurin inhibitors, bring an immunomodulatory aspect to treatment. By inhibiting certain immune responses, they contribute to psoriasis control. Pimecrolimus is applied twice daily in adults, while tacrolimus caters to both children and adults. These agents are especially useful in sensitive areas where corticosteroids may pose challenges.

Coal Tar and Salicylic Acid:

Coal tar and salicylic acid provide distinctive approaches. Coal tar, in emulsion or shampoo form, acts by slowing skin cell growth and reducing inflammation. The application frequency varies across age groups. Salicylic acid, incorporated into shampoo, exerts its effects by promoting the shedding of dead skin cells. The application, adjusted for different age groups, offers a targeted solution, particularly for scalp psoriasis.

In navigating the diverse landscape of psoriasis management, understanding the nuances of these topical agents allows healthcare providers to tailor treatments for optimal efficacy and patient satisfaction.

CONCLUSION

In conclusion, the multifaceted nature of psoriasis demands a diverse and tailored approach to its management. The array

of topical agents discussed, from corticosteroids to vitamin D analogs, retinoids, calcineurin inhibitors, and unconventional treatments like coal tar and salicylic acid, highlights the complexity of addressing this chronic skin disorder. Healthcare providers must navigate these options judiciously, considering factors such as potency, patient age, and affected areas. By delving into the intricacies of each treatment, clinicians can optimize therapeutic outcomes and enhance the quality of life for individuals grappling with psoriasis. Ongoing research and a patient-centered mindset will continue to shape the landscape of psoriasis management, offering hope for more effective and personalized interventions in the future.

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