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Herbal Synergy: Exploring the Multifaceted Benefits of Poly-Herbal Gels in Fungal Skin Infection Management

Pratiksha Devlal Aghadate¹, Dr. P. B. Dudhe², Dr. H. A. Sawarkar³, Dr. K. R. Biyani⁴ Department of Industrial Pharmacy, Anuradha College of Pharmacy, Chikhli, Buldhana, India^{1,2,3} Campus Director & Principal, Anuradha College of Pharmacy, Chikhli, Buldhana, India⁴

Abstract: Fungal skin infections, prevalent and persistent dermatological concerns, pose challenges in the current therapeutic landscape. Conventional treatments, while effective to some extent, encounter limitations, including prolonged regimens and emerging drug resistance. In response, the exploration of poly-herbal antifungal gels has gained momentum. This review synthesizes current knowledge on the formulation, mechanisms of action, and clinical implications of poly-herbal gels in fungal skin infection management.

The formulation of poly-herbal gels involves the strategic integration of active compounds from Aloe vera, tea tree oil, Neem, and turmeric, each contributing to a synergistic blend. Mechanistically, these gels inhibit fungal growth, disrupt fungal cell membranes, and exert immunomodulatory effects, offering a comprehensive approach to infection management. Clinical studies, encompassing randomized controlled trials and case reports, showcase the adaptability and efficacy of poly-herbal gels across diverse patient populations. Comparative analyses with conventional treatments highlight potential advantages, while patient testimonials underscore positive outcomes and enhanced quality of life.

Challenges, including formulation intricacies and standardization concerns, are acknowledged, prompting considerations for future research directions. The regulatory landscape and market perspectives reveal evolving trends, reflecting a growing acceptance of plant-based dermatological solutions. In conclusion, poly-herbal antifungal gels present a promising avenue for the future of fungal skin infection management, offering a holistic, patient-centric approach that aligns with evolving consumer preferences and addresses the limitations of current therapeutic options

Keywords: Poly-herbal, antifungal gels, dermatological care, synergistic effects, clinical trials, formulation challenges, regulatory landscape, market trends

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