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CHILDHOOD PSORIASIS: THERAPEUTIC APPROACHES AND PSYCHOSOCIAL IMPACT

Ryan Rafael Barros de Macedo

Medical student at the Apparecido dos Santos Central Plateau University Center (UNICEPLAC)

Karla Leticia Santos da Silva Costa

Bachelor of Medicine at the State University of Maranhão (UEMA)

Júlia Janot Pinheiro Procópio

Student - Medicine at the Pontifical Catholic University of Goiás (PUC-GO)

Isabela Marchand Rocha Guimarães

Student - Medicine at the Pontifical Catholic University of Paraná (PUCPR)

Maricélia Lopes de Medeiros

Student - Physiotherapy at Universidade Pitágoras Unopar Anhanguera (UNOPAR)

Verônica Gabriela Souza Marques

Student - Medicine at the Faculty of Medical Sciences of Guanambi - BA / Afya



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Abstract: Childhood psoriasis is a chronic inflammatory skin disease whose early manifestation is associated with genetic predisposition and environmental factors. Despite its growing prevalence in the pediatric population, its management still represents a clinical challenge, mainly due to the scarcity of specific therapeutic protocols and the underuse of combination therapies by pediatricians. This study consists of a narrative review of the literature, focusing on current therapeutic approaches and the psychosocial repercussions of childhood psoriasis. It showed that topical corticosteroids remain the first line of treatment, although the combination with vitamin D analogues and the use of calcineurin inhibitors show promise in terms of safety and efficacy. Resistance to the use of systemic and biological therapies reflects gaps in clinical knowledge, leading to delayed access to advanced therapies. In addition to the cutaneous manifestations, the disease has a significant psychological impact, reinforcing the need for a multidisciplinary approach centered on the child.

Keywords: Childhood psoriasis; Topical treatment; Combined therapies; Psychosocial impact; Pediatrics; Multidisciplinary approach.

INTRODUCTION

Psoriasis is a chronic inflammatory skin disease with varied clinical manifestations and a significant impact on patients' quality of life. Although it is often diagnosed in adults, its incidence in children has increased, affecting approximately 1% of the pediatric population. (BRANISTEANU et al., 2021) The early onset of psoriasis is often associated with a significant genetic burden, greater disease severity and an increased risk of comorbidities, such as metabolic and psychiatric disorders. (PINTER et al., 2020)

Among the clinical variants of childhood psoriasis, guttate psoriasis stands out, characterized by the abrupt appearance of small, erythematous and scaly papules and plaques, often triggered by streptococcal infections. Although it can remit spontaneously within a few months, around 40 to 50% of cases evolve into the chronic plaque form, making careful assessment essential to determine the need for treatment. (LEUNG et al., 2023), 2023) On the other hand, pediatric plaque psoriasis ("Ped-Pso") is the most common form of the disease and, despite its significant impact, many pediatricians still have gaps in their knowledge about its proper management, which reinforces the need for greater integration between specialties in therapeutic management. (PINTER et al., 2020)

The pathophysiology of childhood psoriasis is complex and involves an interaction between genetic predisposition and environmental factors such as infections, stress, diet and obesity. Furthermore, it has been described that tumor necrosis factor alpha $(TNF-\alpha)$ inhibitors, such as infliximab and adalimumab, can paradoxically induce psoriasis in children, highlighting the complexity of the immunopathogenic mechanisms involved (BRANISTEANU et al., 2021).

In addition to the cutaneous impact, childhood psoriasis can significantly compromise patients' emotional and psychosocial well-being, increasing the risk of depression, anxiety and social isolation. Thus, the management of the disease should be comprehensive and involve, in addition to drug therapy, psychological support and multidisciplinary follow-up. (BRANISTEANU et al., 2021) Thus, this study aims to review the main therapeutic approaches to childhood psoriasis and discuss its psychosocial impact, emphasizing the need for comprehensive and individualized treatment for this population.

METHODOLOGY

This study consists of a narrative literature review with the aim of compiling and critically analyzing recent scientific evidence on therapeutic approaches and the psychosocial impact of childhood psoriasis. The search strategy was carried out in the PubMed database, using the descriptors "Childhood Psoriasis", "Diagnosis", "Treatment" and "Management", associated by Boolean operators (AND/OR), with a time filter for articles published between 2018 and 2023.

The **inclusion criteria** prioritized studies with full-text access on PubMed, including original articles, narrative reviews and cross-sectional studies that directly addressed the topic. The following were **excluded**: studies outside the time frame; studies focused on adults or with a mixed population (without separation of pediatric data); publications without emphasis on diagnosis, treatment or psychosocial aspects; editorials, case reports and opinion articles; and those not fully available on the selected database.

RESULTS AND DISCUSSION

Topical therapies stand out as the main approach in the management of mild to moderate childhood psoriasis, with topical corticosteroids being widely adopted as the first line due to their rapid efficacy, especially in guttate forms. The diversity of vehicles (lotions, creams, gels) allows adaptation to the characteristics of the lesions, although prolonged use is associated with local adverse effects, such as skin atrophy and telangiectasia, and systemic ones, including adrenal suppression and metabolic alterations. This concern justifies the recommendation to limit application to twice a day and prioritize low to medium potency formulations, with gradual discontinuation after clinical improvement. The combination with vitamin D analogues, such as calcitriol and calcipotriene, demonstrates therapeutic synergy, reducing dependence on corticosteroids and minimizing the risk of atrophy, although it requires caution in the extent of application to avoid hypercalcemia (LEUNG et al., 2023).

Topical calcineurin inhibitors, such as tacrolimus and pimecrolimus, although not approved for psoriasis, have shown efficacy in preliminary studies, with a favorable safety profile in areas of sensitive skin. However, their off-label use and transient effects, such as burning, limit adherence, reinforcing the need for clinical monitoring. (LEUNG et al., 2023) As for prescribing practices, pediatricians tend to start topical treatments in 64% of cases when there is diagnostic certainty, prioritizing low--potency corticosteroids, while combinations with calcipotriol or vitamin D analogues are underused, despite evidence supporting their safety. The preference for calcineurin inhibitors over vitamin D analogues may reflect familiarity with their use in dermatitis, although their application in psoriasis lacks regulatory backing (PINTER et al., 2020).

Systemic therapies, such as oral glucocorticoids, are still prescribed by pediatricians in severe cases, despite guidelines discouraging this practice due to the risk of long-term side effects. Biologics, such as adalimumab and ustekinumab, are rarely used by pediatricians, being mostly restricted to dermatologists, which suggests gaps in training and caution with adverse events, (PINTER et al., 2020).

The results show that childhood psoriasis remains under-treated in terms of therapeutic optimization, with a predominance of low-potency topical corticosteroids, reflecting a conservative approach on the part of pediatricians. This trend, although in line with the management of mild cases, reveals underuse of validated combinations, such as corticosteroids and vitamin D analogues, which could reduce adverse effects and prolong efficacy. (LEUNG et al., 2023) The hesitation to adopt combination

therapies may be related to a lack of familiarity with up-to-date protocols or a preference for simplified strategies in contexts of diagnostic uncertainty. (PINTER et al., 2020)

The preference for calcineurin inhibitors, despite their off-label use, highlights the need for continuing education on scientifically-backed topical alternatives, especially considering their safety profile in sensitive areas. Resistance to adopting biologics, even in severe cases, exposes a disconnect between recent evidence and pediatric clinical practice, reinforcing the importance of interdisciplinary collaboration to ensure access to innovative therapies (PINTER et al., 2020).

The predominance of referrals to dermatologists for complex cases underlines the fragmentation of care, which can delay the start of appropriate treatment. Educational programs for pediatricians, focused on differential diagnosis, therapeutic updates and management of comorbidities, are essential to improve clinical autonomy and reduce dependence on specialists. Finally, the adoption of specific pediatric guidelines, with an emphasis on safe therapies and therapeutic escalation, is crucial

to balance efficacy and safety, ensuring positive long-term outcomes (LEUNG et al., 2023; PINTER et al., 2020).

CONCLUSION

Childhood psoriasis is a chronic dermatological condition that goes beyond the skin and also affects the child's emotional and psychosocial well-being. Early diagnosis, combined with appropriate therapeutic management, is essential to minimize the physical and psychological complications of the disease. Despite the effectiveness of topical corticosteroids in controlling mild forms, there is underuse of proven therapeutic alternatives, such as vitamin D analogues and immunomodulators, especially in more severe contexts. The reluctance to adopt systemic and biological therapies reveals the need for professional updating and greater integration between pediatricians and dermatologists. Thus, care for children with psoriasis should be comprehensive, personalized and multidisciplinary, covering both clinical control of the disease and psychosocial support, with the aim of promoting quality of life and healthy development.

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