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PSORIASIS IN CHILDHOOD: A NARRATIVE REVIEW OF THE LITERATURE

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Abstract: Goal: Analyze the main aspects of psoriasis in childhood, highlighting the symptoms and treatment in this age group. **Bibliographical Review**: Psoriasis is a chronic and immunoinflammatory skin disease, characterized by varied skin lesions with epidermal hyperplasia. The etiology involves genetic, immunological and environmental factors, proven by the high familial incidence. Triggers include psychological stress, cold weather, infections and trauma. The clinical manifestations are diverse, with plaque psoriasis being the most common, followed by forms such as guttate, inverse, nail, palmoplantar and erythrodermic. The diagnosis is essentially clinical, based on the observation of well-defined erythematous papules with silvery scales. Brocq's methodical curettage semiological test can reveal findings such as the candle sign and the bleeding dew sign, characteristic of the disease. Treatment aims to control symptoms and improve quality of life. Therapeutic options include topical corticosteroids, vitamin analogues D, calcineurin inhibitors and phototherapy for mild to moderate forms. In more severe cases, systemic immunomodulators such as methotrexate, cyclosporine and retinoids may be required. Regular monitoring and a multidisciplinary approach are crucial, especially in the management of pediatric patients, to optimize clinical and psychosocial outcomes. **Final considerations:** Pediatric psoriasis continues to be an area of research in need of advances, both in the adaptation of existing therapies and in the development of new therapeutic options specific to children. Effective management not only improves clinical outcomes but also promotes better quality of life for young people affected by this chronic dermatological condition.

Keywords: Psoriasis, Children, Symptoms, Diagnosis, Treatment.

INTRODUCTION

Psoriasis is a chronic and recurrent, non-contagious inflammatory disease, characterized by hyperproliferation of the epidermis, affecting both the skin and joints. Although incurable, the disease has periods of remission and worsening. Its cause is still unknown, but there is an interaction between genetic factors, the immune system and external conditions, which are determining both the onset and progression of the disease (MOSCARDI et al., 2017). Psoriasis is associated with multiple comorbid medical conditions in addition to genetic and environmental risk factors. This relationship between the disease and the various comorbidities is crucial for developing an appropriate treatment plan for the patient (AMIN et al., 2020).

Psoriasis is the most common dermatosis in the first decades of a patient's life, but it can occur at any age. The peak age for the onset of psoriasis manifestations is between 6 and 10 years for boys and between 10 and 14 years for girls. A positive family history is present in a small portion of cases, corresponding to 4.5% of patients. In early childhood, the most common presentation of psoriasis is characterized by the appearance of well-defined erythematous plaques involving the genitalia and gluteal and periumbilical regions, which tend to be persistent and resistant to treatment. Facial involvement is also not rare. Over time, new erythematous-squamous plaques tend to appear, mainly affecting the trunk and limbs (ROMITI et al., 2009).

The diagnosis of psoriasis is mainly clinical. In cases of doubt, a histopathological study can be carried out. Differential diagnoses to be considered in childhood include: seborrheic dermatitis, eczema, superficial mycoses, secondary syphilis, lichen planus, lupus erythematosus, chronic pityriasis lichenoids, nevus, enteropathic acrodermatitis, erythrodermic pemphigus foliaceus, Sneddon-Wilkinson subcorneal pustulosis, acute exanthematous pustulosis generalized and bullous impetigo (HERTZ et al., 2014).

In most pediatric patients, psoriasis can be treated with topical medications. Phototherapy is an option for more extensive and refractory cases. Systemic therapy is reserved for severe and extensive cases that do not respond to topical treatment and/or phototherapy. Therefore, specific therapies will depend on the form and extent of the disease (CEOVIC et al., 2006). Despite variation among pediatric patients with psoriasis, the therapies used are essentially the same as those used in adults, with dosage calculated based on age, weight, and types of formulations available. Topical therapy remains the first-line treatment when psoriasis is limited to the skin and emollients, keratolytics, corticosteroids and calcipotriene are used. For systemic treatment, the following are used: sulfasalazine, systemic retinoids, methotrexate, cyclosporine (SILVA et al., 2014).

Considering the relevance of the topic and the lack of national studies, this narrative review of the literature aims to analyze the main aspects of psoriasis in childhood, highlighting the symptoms and treatment in this age group.

LITERATURE REVIEW

DEFINITION

Psoriasis is a systemic, immunoinflammatory, non-contagious, cutaneous-articular and chronic disease, characterized by polymorphic lesions with epidermal hyperplasia (AZULAY, 2017). The cause of psoriasis is still unknown. However, it is believed to be multifactorial, involving genetic, immunological and environmental factors. The genetic link is

evidenced by the high incidence within families (70% in identical twins and 23% in fraternal twins). It is known that at least 12 loci (PSORS1-PSORS12) are involved, with PSORS1 on chromosome 6p21, which is part of the major histocompatibility complex (MHC), being the major determinant. There is a correlation with haplotypes such as HLA-DR7, B13, B16 and B17 in cutaneous types, and HLA-A26, B27, B38, DR4 and DR7 in axial and/or peripheral arthritic types, with HLA-Cw6 having the greatest involvement in both cutaneous as well as articulating (AZULAY, 2017; SILVA, 2007). Furthermore, there are other triggering or aggravating factors, such as psychological aspects (the most important factor), cold weather, infections, trauma or microtrauma (Koebner Phenomenon), metabolic and endocrine changes, and the use of drugs (AZULAY, 2017)

Psoriasis is the prototype of the Th1, Th17 and Th22 inflammatory response, characterized by increased production of several cytokines, including interferon gamma, tumor necrosis factor alpha, interleukin (IL) 17 and IL22. This process is triggered by dendritic cells in the skin, which are in increased numbers in psoriasis plaques. Furthermore, myeloid dendritic cells from psoriasis patients produce more IL23, a potent stimulator of T cell proliferation. Some dendritic cells may activate the innate immune response by another route, stimulating keratinocytes to produce a range of inflammatory molecules, such as IL1., IL6 and IL8 (FELIX, 2014).

EPIDEMIOLOGY

Psoriasis is a dermatosis that is most common in the first decades of a patient's life, but it can occur at any age. Among patients who develop psoriasis in childhood, 49% have first-degree relatives affected by the disease, while in patients with the onset of lesions in the adult life this number reaches 37%. It is estimated that between 25% and 45% of cases may begin before the age of 16, with 2% beginning before the age of 2. The earlier the disease appears, the more serious its evolution tends to be, which can be disfiguring in children and cause psychological damage and compromised quality of life (ROMITI et al., 2009).

The forms of psoriasis presentation are different between adults and children, with plaque psoriasis being the most common variant in the latter, with a prevalence ranging from 34% to 84% (BEHRMAN et al., 2002). Guttate psoriasis is a clinical variant that affects people in younger age groups, being common in pediatric patients, with a prevalence ranging from 6.4% to 44% (WOLFF et al., 2011). Furthermore, 10 to 40% of children with psoriasis present nail changes (FARIAS et al., 2010). In the pediatric age group, psoriasis differs from the adult form in that it is itchier and more common in girls, presenting less severe and less scaly lesions. In most children, the disease is triggered by infections and manifests as guttate psoriasis, with frequent facial involvement (CORRALES et al., 2013).

SYMPTOMATOLOGY

According to the Brazilian Consensus on Psoriasis (2012), psoriasis lesions are characterized by well-defined papules and erythematous plaques, of varying sizes and with silvery scaling, often arranged symmetrically. In childhood, psoriasis may present atypical characteristics, such as single or small plaques, with mild scaling, mainly affecting the face (periorbital, perioral and nasal areas). Follicular involvement with itching is characteristic of the disease in children. Classic lesions affect the scalp, extensor surfaces of the limbs and trunk, but involvement of hands, feet, genitalia and flexor

areas is common in childhood (MEHANNA et al., 2015).

In children, the most common types are plaque, gout, inverse, periorificial, palmoplantar, erythrodermic and nail psoriasis (MENTER et al., 2020). In infants, the most frequently affected body regions are the diaper and navel area, while in older children, they are the face and nails (JANNIGER et al., 2005). Furthermore, children often present with thinner and smaller plaques, which can make diagnosis difficult due to the differentiation of clinical characteristics observed in adults. (TOLLEFSON et al., 2014).

Plaque psoriasis is the most common form, characterized by the presence of scaly papulo-erythematous lesions forming circular-oval-shaped erythematous plaques, with well-defined limits, covered by thick, loosely adherent, grayish-white scales, the removal of which reveals a hemorrhagic stitch. It affects extensive areas such as elbows, knees, scalp and lower back. (CASTILHO et al., 2021; DE OLIVEIRA FRANÇA et al., 2021)

Guttate psoriasis is the second most common subgroup and has been associated with greater severity. Psoriasis is characterized by small papules that appear abruptly on the trunk and proximal extremities. This condition is strongly associated with streptococcal pharyngitis and may occur at the same time or before the appearance of the rash. However, antibiotics are not effective in treating this form of psoriasis as they do not change the course of the disease. Guttate psoriasis can regress spontaneously in 3 to 4 months or evolve into plaques (WOLFF et al., 2011; HEBERT et al., 2023).

In inverted psoriasis, the lesions are well-defined erythematous plaques with little or no scaling in the area of the axillary, inguinal and gluteal folds, in the navel below the breast and around the genitals, worsening with friction and moisture from sweat. Itching, sweat irritation and sensitivity are common symptoms. Nail psoriasis affects the fingernails and toenails, causing symptoms such as abnormal nail growth, discoloration (which can vary from yellow to brown), thickening, and, in more severe cases, the nails may fall out (CASTILHO et al., 2021; HEBERT et al., 2023).

In psoriasis, the palmar area may be affected as part of a generalized rash or may be the sole location of the disease. Palmoplantar psoriatic lesions generally appear as scaly plaques similar to those of chronic eczema or with a degree of erythema similar to that seen in the flexures. Palmoplantar psoriasis is an uncommon clinical variant of psoriasis, which is difficult to treat and significantly compromises patients' quality of life. It is characterized by the eruption of sterile, recurrent pustules, associated with erythematous-scaly lesions (DE OLIVEIRA FRANÇA et al., 2021).

The most frequent changes include pitting (small depressions) in the nails due to involvement of the nearby matrix. Other common manifestations are onycholysis (detachment of the nail from the nail bed), subungual hyperkeratosis (thickening of the skin under the nail) and "oil stains" that appear under the nails, indicating involvement of the nail bed. Nail involvement may appear isolated, precede, coincide with or appear after psoriasis skin lesions, and may also indicate a more prolonged course of the disease (CASTILHO et al., 2021; HEBERT et al., 2023).

Erythrodermic psoriasis is considered the most serious and rare form of the disease. In this condition, the skin becomes inflamed over much or all of the body, resulting in a widespread rash that can cover large areas. Due to intense inflammation, the skin loses its normal protective barrier function, leaving the patient more vulnerable to serious infections

(CASTILHO et al., 2021). In erythrodermic psoriasis, more than 90% of the body surface is affected, with little desquamation, being extremely rare. Hyperthermia or hypothermia may occur and, in chronic cases, there is a possibility of decreased cardiac output and impairment of liver and kidney functions. The imminent risk of cardiovascular and septic shock makes these patients extremely serious, requiring immediate hospitalization and rapid therapeutic intervention, in addition to supportive measures (HERTZ et al., 2014).

Psoriasis in the diaper area presents lesions with clearer and brighter erythema, well-defined borders and involvement of the inguinal folds, with variable itching. Classically, such signs and symptoms have little response to conventional treatment for diaper rash. One to two weeks after the appearance of erythema in the diaper area, some children develop classic psoriasis lesions on the face, scalp, trunk and limbs (ROMITI et al., 2009). This type of psoriasis is common in babies, with 26% having a history of diaper rash. Koebnerization, a diagnostic and therapeutic characteristic of psoriasis, refers to the tendency to develop skin lesions at sites of friction or minor trauma to the skin. Thumb involvement, representing Koebnerization due to thumb sucking, is also a common feature of psoriasis in infants (HEBERT et al., 2023).

DIAGNOSIS

The diagnosis of psoriasis is eminently clinical. As for the semiological test, Brocq's methodical curettage can be performed - a scraping of the lesion. Through this test, two typical clinical findings of this dermatosis are obtained: candle sign, in which there is a detachment of silvery-white scales (this is the stratum corneum with parakeratosis) and the bleeding dew sign or Auspitz sign in which they appear some hemorrhagic spots after scraping these scales (due to the thinning of the suprapapillary epidermis). The Woronoff halo or ring (perilesional clear zone) is quite characteristic of the disease, however, rarely observed (ROMITI et al. 2009; AZULAY, 2017). Laboratory tests can be performed, although they are nonspecific. These tests may reveal eventual increases in uric acid, erythrocyte sedimentation rate, alpha2-globulin, C-reactive protein and, in some cases, leukocytosis, as observed in acute extensive pustular presentations. Furthermore, in more atypical cases, it is possible to perform a histopathological examination (AZULAY, 2017).

The histological picture of psoriasis is not specific, but is quite suggestive. The first changes include vasodilation and perivascular inflammatory infiltrate, which invades the epidermis, where mild spongiosis, neutrophil invasion and parakeratosis appear. In defined lesions, there is regular stretching of the epithelial cones, with thinning in the suprapapillary portion. The papillae are enlarged and swollen, displaying dilated and tortuous capillaries. In the epidermis, there is parakeratosis, disappearance of the granular layer and the presence of clusters of neutrophils, known as Munro micro-abscesses. In pustular psoriasis, cavities containing neutrophils, called Kogoj spongiform pustules, may occur. The inflammatory infiltrate is discrete and composed of mononuclear cells, especially lymphocytes (ROMITI et al., 2009).

Differential diagnoses to be considered in childhood include: seborrheic dermatitis, eczema, superficial mycoses, secondary syphilis, pityriasis rubra pilaris, lichen planus, lupus erythematosus, chronic pityriasis lichenoids, Nevil, enteropathic acrodermatitis, erythrodermic pemphigus foliaceus, drug erythroderma, subcorneal pustulosis of Sneddon-Wilkinson, acute generalized exanthematous pustulosis and bullous impetigo (HERTZ et al., 2014)

TREATMENT

Psoriasis treatment aims to control the disease and improve the patient's quality of life. To determine the best therapeutic plan, it is essential to consider factors such as gender, age, clinical condition, severity of the disease, associated signs and symptoms, comorbidities, concomitant medications, previous treatments, adverse effects and the participation of parents or guardians in the treatment. Initially, it is important to clarify to patients and their guardians the characteristics of the disease and its course, in addition to educating them on the importance of sun exposure. In some cases, psychotherapeutic support may be necessary (ROMITI et al., 2009).

In most pediatric patients, psoriasis can be treated with topical medications. Phototherapy is an option for more extensive and refractory cases. Systemic therapy is reserved for severe and extensive cases that do not respond to topical treatment and/or phototherapy. Therefore, specific therapies will depend on the form and extent of the disease (ROMITI et al., 2009). For pediatric patients to undergo systemic treatment for psoriasis, they must meet at least one of the following criteria: achieve, at least 10 points on the Psoriasis Area and Severity Index (PASI) test or the Children's Dermatology Life Quality Index (CDLQI) test, respond inadequately to topical therapy, present lesions in sensitive areas of the body, have any comorbidity or manifest any disabling symptom of psoriasis (FINLAY et al., 2005).

Pediatric forms of treatment are still little studied and are generally adapted from adult therapies (FORTINA et al., 2017). Topical treatment consists of the use of corticosteroids, vitamin D3 and calcineurin analogues and inhibitors (MEHANA et al., 2015). The first line for children with mild to moderate psoriasis is topical corticosteroids. This medication has anti-inflammatory, antiproliferative (antimitotic), immunosuppressive, vasoconstrictive and antipruritic actions and is supported by options that act directly on skin lesions, in order to minimize possible side effects on other organs. For mild injuries, monotherapy or a combination of topical therapies are usually effective. For moderate or severe injuries, a combination with phototherapy and/or systemic therapy is often necessary, providing better comfort for the patient (ROMITI et al., 2009; HERTZ et a., 2014; BRAZILIAN SOCIETY OF DERMATOLOGY, 2012).

A limited number of low-potency topical corticosteroids are the only options indicated to treat

Pediatric psoriasis in children under 12 years of age (HEBERT et al., 2023.) The location of psoriasis lesions determines the potency of topical corticosteroids to be used. High-potency corticosteroids are indicated for thicker areas, such as the scalp, palms and soles, while low-potency corticosteroids are used in thinner areas. Side effects include telangiectasias, atrophy and striae. Intermittent use of these medications helps minimize the risk of side effects (BRAZILIAN SOCIETY OF DERMATOLOGY, 2012).

Calcipotriol is an analogue of vitamin D3 that reduces the proliferation and induces the differentiation of keratinocytes, in addition to modifying the immune response. It is safe and, as monotherapy, is moderately effective in treating mild and moderate forms of psoriasis in adults. When used in combined or sequential regimens with topical corticosteroid therapy, it provides longer periods of remission, without the "rebound" effect often induced by corticosteroid monotherapy. It must be applied at night and washed off in the morning. The efficacy and safety of calcipotriol in the treatment of pediatric patients are not yet well established.

However, different reports in the literature indicate that calcipotriol ointment has been shown to be effective, well tolerated and safe in children with psoriasis, with local irritation being the most commonly reported side effect (ROMITI et al., 2009).

Among calcineurin inhibitors, pimecrolimus and tacrolimus are used and are indicated for forms located on the face, folds and semi-mucosa, as they cause fewer side effects than corticosteroids and vitamin D analogues and because they have better absorption in these areas. Its effectiveness is extremely variable. In Brazil, pimecrolimus is indicated for children from three months of age and tacrolimus, from two years of age. It is not recommended to use in the presence of viral, bacterial or fungal infections (CORDORO et al., 2008).

Systemic treatment is indicated in cases where topical treatment is insufficient or when lesions occur on the face, hands and feet. Like topics, they can be used in monotherapy, combination, rotational or intermittent therapy. There are also other therapeutic types such as second-choice drugs, antibiotics, systemic corticosteroids and psychotherapy (ROMITI et al., 2009). Patients with an inadequate response to topical treatments or with additional comorbidities may be given oral immunomodulatory agents, such as methotrexate or cyclosporine, or systemic retinoids, such as isotretinoin or acitretin.

Methotrexate is a folic acid antagonist. It can be administered orally, intramuscularly and intravenously, and is essentially excreted via the kidneys. Features rapid onset of action. This medication must be used in extensive and resistant cases of psoriasis in childhood or in cases of arthropathic, erythrodermic and generalized pustular psoriasis. The dose used for pediatric patients is 0.2 to 0.4 mg/kg/week, up to a total weekly dose of 12.5-20 mg. It can be associated with folic acid (1-5 mg orally/day). Methotrexate, in low doses, can be associated with the use of biologics, especially infliximab, based on its inhibitory action on antibody production. The most common side effect is gastric intolerance. Methotrexate has multiple drug interactions and its absolute contraindications are: pregnancy and lactation, liver cirrhosis, active liver infection and liver failure. Live or attenuated virus vaccines must be avoided (ROMITI et al., 2009).

Cyclosporine A is a potent immunosuppressant used mainly in severe cases of psoriasis, such as erythrodermic psoriasis, and in situations where the disease progresses quickly and does not respond to other treatments. The drug works by inhibiting activated CD4 T lymphocytes, preventing the release of interleukin-2 (IL-2), which is crucial for the proliferation and activation of T cells. The recommended dose of cyclosporine A is 2 to 5 mg/kg per day, administered daily for a period of three to four months. After this period, the medication must be gradually discontinued to avoid adverse effects. Side effects include nephrotoxicity, hypertension, nausea, paresthesia, gingival hyperplasia, hypertrichosis and increased risk of neoplasms, but do not appear to be more frequent in children compared to adults. with psoriasis. Although cyclosporine A may have the same side effects in children and adults, a greater frequency of these effects has not been observed in children with psoriasis compared to adults. Due to the potential for serious side effects, the use of cyclosporine A requires close monitoring of renal function., hematological and hepatic every two to four weeks (ROMITI et al., 2009).

Acitretin is a derivative of vitamin A (retinol) widely used in the treatment of severe forms of psoriasis, particularly generalized pustular psoriasis, generalized plaque psoriasis and erythrodermic psoriasis. The recommended dosage varies between 0.5 to 1.0 mg/kg/day.

Especially indicated in generalized pustular psoriasis, also used in generalized plaque psoriasis and erythrodermic psoriasis. In cases of erythrodermic psoriasis, clinical improvement is generally expected after three to four months of treatment. Acitretin is considered the systemic therapeutic option most used in children with extensive conditions resistant to topical treatment and phototherapy. Side effects include: mild cheilitis (dose-dependent), epistaxis, conjunctivitis, paronychia, alopecia, pruritus, dyslipidemia and teratogenicity (etretinate persists in the body for two years and must therefore be contraindicated in women of childbearing age). The effectiveness of acitretin tends to be moderate, but is significantly increased when associated with phototherapy. The clinical response to treatment is generally delayed. Prolonged therapy with acitretin must be carefully evaluated in children, as there are reports of premature closure of bony epiphyses, calcifications of tendons and ligaments, and delayed bone growth. monitor possible adverse effects on bone development (ROMITI et al., 2009).

Immunobiologicals are a group of medications that specifically and specifically interfere with the immune system, blocking or stimulating one or more pathways of the immune response. These medications are proteins obtained through advanced biotechnology techniques and are used in several autoimmune diseases, including psoriasis. Immunobiologicals act at different points in the immune system: trafficking of lymphocytes from the microcirculation to the skin, antigen presentation of antigen-presenting cells to lymphocytes, modulation of specific cytokines involved in the inflammatory response. They present high complexity and structural variability, obtained by modern biotechnology and at a very high cost (ROMITI et al., 2009)

Furthermore, the topical phosphodiesterase-4 (PDE4) inhibitor roflumilast was recently approved in the United States (USA) for the treatment of plaque psoriasis in patients aged 12 years. Other systemic medications currently under investigation for pediatric PsO in the US include biologics such as the TNF inhibitor Certolizumab pegol; the IL-17 receptor A inhibitor brodalumab; the IL-23 inhibitors guselkumab, tildrakizumab and risankizumab; oral PDE4 inhibitors such as apremilast; the tyrosine kinase 2 inhibitor eucravacitinib; and new non-steroidal topicals such as tapinarof which is an aryl receptor inhibitor (HEBERT et al., 2023).

Phototherapy is widely used as a safe and effective treatment, especially in severe cases. It is classified according to the type of irradiation, being ultraviolet A (UVA) or ultraviolet B (UVB), which involves direct exposure of the affected area to light. This localized method minimizes the risks associated with exposure to UV radiation, such as genetic mutations. Although it does not cure psoriasis, it helps keep the disease in remission. Summer is the most beneficial season for patients, who must adopt sunbathing as a routine, always with moderation in exposure to ultraviolet radiation (DE OLIVEIRA FRANÇA et al., 2021). Although narrowband UV-B phototherapy is effective as a treatment, its use as a second option in children is limited due to the cost and the need for office visits 2 to 3 days a week (HERBET et al., 2023).

FINAL CONSIDERATIONS

This analysis revealed the main aspects of psoriasis in childhood, highlighting the symptoms and treatment in this age group. Pediatric psoriasis has particularities in presentation and treatment, with necessary adaptations to therapies used in adults. It is a complex and multifaceted disease that requires a comprehensive approach to diagnosis and treatment. Its chronic nature and the variety of presentations, especially in childhood, highlight the need for continuous and personalized monitoring for each patient. Psoriasis can present itself in different clinical forms, including plaque psoriasis (most common), guttate psoriasis, inverted psoriasis, nail psoriasis, palmoplantar psoriasis and erythrodermic psoriasis. Each clinical form has specific characteristics that influence the diagnosis and therapeutic plan. Psoriasis treatment must be adapted to the individual needs of each patient, considering factors such as age, severity of the disease, location of the lesions and the presence of comorbidities. In children, the approach must be particularly careful, using topical therapies as the first line and reserving systemic treatments for severe or refractory cases. The combination of therapies can provide better control of the disease and improve patients' quality of life. Although many effective treatments are available, pediatric psoriasis is still an area where more research is needed. The adaptation of adult therapies for children and the exploration of new therapeutic options are essential to advance the management of the disease. Effective disease management not only improves clinical outcomes but also promotes a better quality of life for patients affected by this chronic skin condition.

REFERENCES

1-AMIN, M. et al. **Psoriasis and co-morbidity. Acta dermato-venereologica**, v. 100, n. 3,p. 81–87, 30 jan. 2020.

2-AZULAY. **Dermatologia.** 7 ed. Rio de Janeiro: Guanabara Koogan, 2017

3-BEHRMAN, R; KLIEGMAN, R; JENSON,H; **Nelson Tratado de Pediatria**, 16º edição, Guanabara Koogan, 2002.

4-CEOVIV R., PASIC A;, LIPOZENCIC J., MURAT-SUSIC S;,SKERLEV M., HUSAR K., et al. **Treatment of childhood psoriasis**. Acta Dermatovenerol Croat. 2006; 14:261-4

5-CASTILHO, A. C. da S.; LOPES, C. de O. P..; SALLES, B. C. C. Physiopathology of psoriasis and its immunological aspects: a systematic review. Research, Society and Development, *[S. l.]*, v. 10, n. 11, p. e256101119346, 2021. DOI: 10.33448/rsd-v10i11.19346. Disponível em: https://rsdjournal.org/index.php/rsd/article/view/19346. Acesso em: 12 jul. 2024.

6-CORRALES, L. I; RAMNARINE,S; LANSANG, P.Treatment of Childhood Psoriasis with Phototherapy and Photochemotherapy, 2013.

7-CORDORO K.M. **Systemic and light therapies for the management of childhood psoriasis: part II**. Skin Therapy Lett. 2008;13:1-3

8-DE OLIVEIRA FRANÇA, M. L.; VIEIRA LENA, A.; NAKAMURA, J.; DE SOUZA BUKOSKI, L.; DE SOUZA BRAGA, L. **Caracterização da psoríase e seu tratamento: uma revisão narrativa**. SaBios-Revista de Saúde e Biologia, *[S. l.]*, v. 16, n. 1, p. 1–13, 2021. DOI: 10.54372/sb.2021.v16.2428. Disponível em: https://revista.grupointegrado.br/revista/index.php/sabios/article/view/2428. Acesso em: 12 jul. 2024.

9-FARIAS, C D; CHIACCHIO,N; TOSTI, A; HIRATA, H,S. Aspectos dermatoscópicos na psoríase ungueal.

10-FINLAY, A.Y. **Current severe psoriasis and the Rule of Tens**. British Journal of Dermatology, v. 152, n. 5, p. 861–867, 2005.

11-FORTINA, A. B. et al. **Treatment of severe psoriasis in children: recommendations of an Italian expert group**. European Journal of Pediatrics, v. 176, n. 10, p. 1339-1354, 23 ago. 2017.

12-FELIX, P. A. O. **Psoríase e Comorbidades**. AbbvieLine. 2014.

13-HEBERT A.A., BROWNING J., KWONG P.C., et al. **Diagnosis and management of pediatric psoriasis: an overview for pediatricians**. *J Drugs Dermatol.* 2023;22(8):742-752. doi:10.36849/JDD.7531.

14-HERTZ A. Psoríase na infância. Revista Hospital Universitário Pedro Ernesto. 2014.

15-JANNIGER, C. K. et al. **Infantile psoriasis**. Cutis, v. 76, n. 3, p. 173–177, 1 set. 2005

16-MEHANNA, J. et al. **Tratamento da psoríase infantil: revisão de literatura e proposição de algoritmo**. Revista Thêma et Scientia, v. 5, n. 2, p. 108-116, 7 dez. 2016.

17-MENTER, A. et al. Joint American Academy of Dermatology–National. **Psoriasis Foundation guidelines of care for the management and treatment of psoriasis in pediatric patients**. Journal of the American Academy of Dermatology, v. 82, n. 1, p. 161–201, jan. 2020.

18-ROMITI, R., MARAGNO, L., ARNONE, M., TAKAHASHI, M. D. F.. (2009). **Psoríase na infância e na adolescência.** *Anais Brasileiros De Dermatologia*, *84*(1), 09–20. https://doi.org/10.1590/S0365-05962009000100002

19-SILVA, K.S.; SILVA, E.A.T. **Psoríase e sua relação com aspectos psicológicos,stress e eventos da vida**. Estud. psicol., Campinas, v. 24, p. 257-266, Jun. 2007.

20-SOCIEDADE BRASILEIRA DE DERMATOLOGIA.**Consenso Brasileiro de Psoríase 2012 Guias de Avaliação e Tratamento**. 2 ed. Rio de Janeiro, 2012.

21-TOLLEFSON, M. M. **Diagnosis and Management of Psoriasis in Children**. Pediatric Clinics of North America, v. 61, n. 2, p. 261–277, abr. 2014.

22-WOLLF, K; GOLDSMITH,L; KATZ, S; GILCHREST,B; PALLER,A; LEFFELL,D. **Fitzpatrick Tratado de Dermatologia**, 7º edição, volume I. Revinter, 2011.