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CASE REPORT

# Chronic lichenoid pityriasis in an adolescent

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## Abstract

**Introduction:** Pityriasis lichenoides chronica (PLC) is a rare inflammatory skin disease, considered a subtype of pityriasis lichenoides. Although the etiology remains unknown, studies suggest it may result from a hypersensitivity reaction to an infection or represent a primary lymphoproliferative disorder, typically affecting children and adolescents. **Case report:** We present the case of a 15-year-old male adolescent with a five-month history of a recurrent, asymptomatic, and generalized rash. Dermatological examination revealed erythematous scaly oval papules, some with mild erosion, predominantly distributed over the abdomen and proximal extremities. Based on the suspicion of pityriasis lichenoides, a skin biopsy was performed, which confirmed the diagnosis. Treatment with topical corticosteroids resulted in significant clinical improvement with no recurrence during the 12-month follow-up period. **Discussion:** PLC is an uncommon condition that can pose diagnostic challenges due to its non-specific clinical manifestations, requiring careful differential diagnosis from other papulosquamous disorders. Although typically benign, annual dermatological follow-up is recommended due to the rare but potential risk of progression to cutaneous T-cell lymphoma.

***Keywords:*** Chronic lichenoid pityriasis. Pityriasis lichenoides. Adolescent. Follow-up studies.

## *Pitiríase liquenóide crónica em adolescente*

## Resumo

**Introdução:** A pitiríase liquenóide crónica é uma doença inflamatória cutânea rara considerada um subtipo de pitiríase liquenóide. Com etiologia desconhecida, estudos sugerem tratar-se de uma resposta de hipersensibilidade à infeção ou de um distúrbio linfoproliferativo primário, que afeta predominantemente crianças e adolescentes. **Relato de caso:** Apresentamos o caso de um adolescente, sexo masculino, de 15 anos com queixas de erupção cutânea generalizada recorrente, assintomática, com 5 meses de evolução. O exame dermatológico demonstrou pápulas ovaladas eritemato-descamativas, algumas com ligeira erosão, essencialmente no abdómen e extremidades proximais bilateralmente, sem atingimento palmoplantar. Pela suspeita de pitiríase liquenóide, realizou biópsia cutânea, que confirmou o diagnóstico. O tratamento com corticoide tópico resultou em melhoria clínica significativa sem recorrência durante o período de seguimento de 12 meses. **Discussão:** A pitiríase liquenóide crónica é uma condição pouco comum que pode apresentar desafios diagnósticos devido às suas manifestações clínicas inespecíficas, requerendo um diagnóstico diferencial cuidadoso de outras perturbações papuloescamosas. Embora tipicamente benigna, o seguimento dermatológico anual está recomendado pelo risco raro, mas potencial, de progressão para linfoma cutâneo de células T.

***Palavras-chave:*** Pitiiríase liquenoide crónica. Pitiiríase liquenoide. Adolescente. Estudos de seguimento.

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## Keypoints

**What is known**

- Pityriasis lichenoides chronica is a rare cutaneous inflammatory disease with unknown etiology.
- Pityriasis lichenoides chronica occurs most frequently in children and adolescents, presenting a chronic, fluctuating clinical course with periods of exacerbation and remission.
- The cutaneous lesions are characterized by scaly papules, which may be asymptomatic or cause pruritus, primarily affecting the torso and limbs.

**What is added**

- The presence of lesions at different stages of development represented a significant clinical finding in raising diagnostic suspicion, reinforcing this clinical criterion as a crucial clue in the initial assessment.
- A complete therapeutic response was observed with regressive topical corticosteroid treatment, demonstrating that less invasive approaches can achieve full lesion resolution while avoiding the potential adverse effects of systemic therapies.
- This case highlights the importance of annual dermatologic follow-up, even in apparently benign forms, due to its potential – albeit rare – risk of malignant transformation.

## Introduction

Pityriasis lichenoides encompasses a spectrum of rare inflammatory skin diseases – pityriasis lichenoides chronica (PLC), pityriasis lichenoides et varioliformis acuta (PLEVA), and the febrile ulceronecrotic variant (FUMHD) – which likely represent different manifestations of the same underlying condition[1,2,3]. PLC is a rare inflammatory skin disease with uncertain etiology. However, studies suggest it may result from a hypersensitivity reaction to infectious agents, while other theories point to a primary lymphoproliferative disorder[1]. Cutaneous lesions are characterized by scaly papules, which can be asymptomatic or cause pruritus, primarily affecting the torso and limbs. The lesions typically present at different stages of development, a fundamental clinical finding to consider in differential diagnosis. Although considered a benign condition, follow-up is recommended due to the rare but possible progression to cutaneous T-cell lymphoma.

## Case report

A 15-year-old male adolescent presented to the emergency department with a generalized, recurrent, asymptomatic rash that had been developing over five months. There was no history of fever, recent infections, medication use, or similar cases in family members. Past medical and family history were unremarkable. Dermatological examination revealed oval erythematous scaly papules, some with slight erosion and others purpuric, predominantly distributed over the abdomen and proximal extremities bilaterally, with no involvement of the palms or soles of the feet (Fig. 1A and B). The lesions were at different stages of development. No lymphadenopathy was detected.

A skin biopsy was performed, revealing mild to moderate inflammatory infiltrate in the dermis and hydropic degeneration of the basal layer associated with a moderate lymphocytic infiltrate at the dermoepidermal junction (Fig. 2), and confirming the diagnostic suspicion of PLC. The patient was treated with a potent corticosteroid (clobetasol propionate) daily for two weeks, followed by weekend-only application for an additional four weeks, resulting in significant clinical improvement. During the 12-month follow-up period, no recurrence of the disease was observed.

## Discussion

This case illustrates an uncommon condition whose non-specific clinical manifestations can make diagnosis challenging. PLC occurs most frequently in children and adolescents, presenting a chronic, fluctuating clinical course with periods of exacerbation and remissio[2]. Given its non-specific presentation, several differential diagnoses must be considered, including pityriasis rosea, guttate psoriasis, secondary syphilis, lichen planus, and drug eruption[3]. As demonstrated in our case, clinical examination combined with histopathology is essential for establishing an accurate diagnosis and distinguishing PLC from these similar conditions[3].

Although treatment is not mandatory, it can improve the appearance of skin lesions. In our patient, topical corticosteroids proved to be effective, aligning with current evidence suggesting that topical corticosteroids are particularly beneficial in localized disease. Nevertheless, ultraviolet B (UVB) phototherapy has been demonstrated to be a safe option in this age group[2], thus representing the subsequent therapeutic step should there be no response to topical corticosteroid treatment. Beyond these therapeutic options, and in cases of more extensive disease, oral antibiotics[4] or UVB phototherapy, either as monotherapy or in combination with topical corticosteroids, are viable alternatives. Methotrexate is considered a reasonable alternative, particularly for patients with severe forms of the disease[1,5]. The clinical course of PLC is characterized by spontaneous

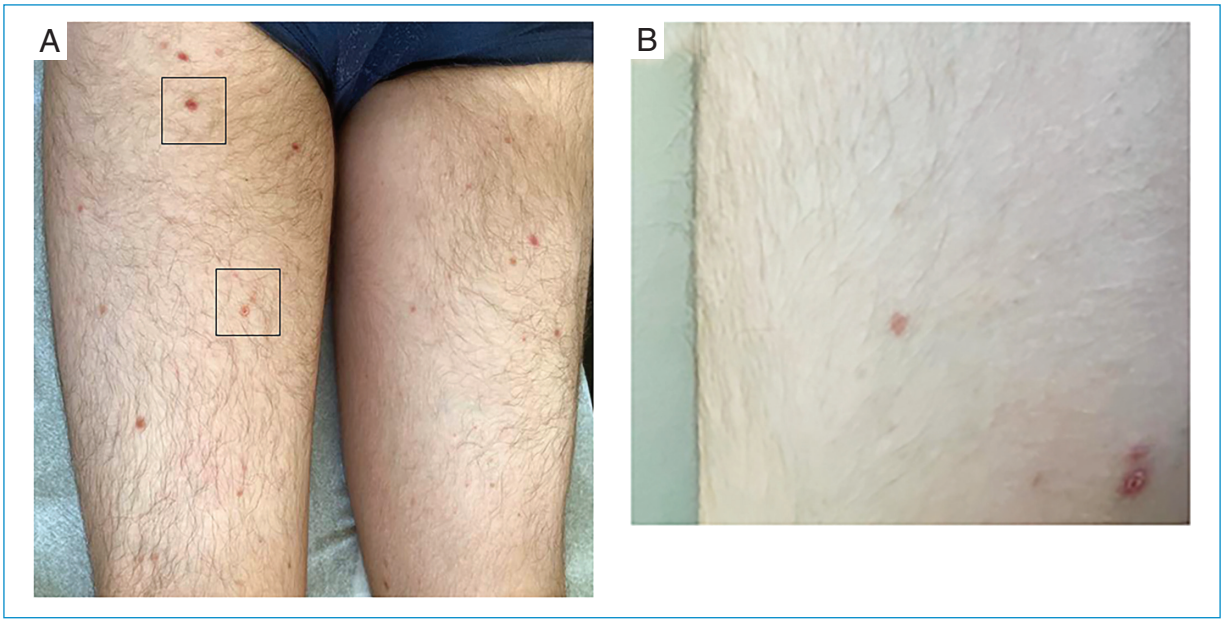


**Figure 1. A:** clinical image showing oval erythematous-scaly and purpuric papules on the lower limbs. **B:** erythematous scaly papule on the left upper limb

remissions and exacerbations, typically resulting in complete resolution, although some cases may persist for years. Our patient demonstrated no recurrences during the 12-month follow-up period, indicating a favorable therapeutic response. Despite its typically benign nature, the rare risk of progression to lymphoproliferative malignancies warrants annual dermatological assessment and vigilance for atypical lesions[6].

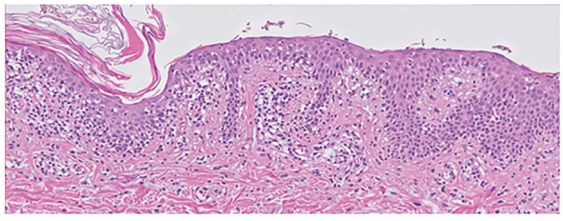

**Figure 2.** HE 200x biopsy - hydropic degeneration of the basal layer associated with moderate lymphocytic infiltrate at the dermoepidermal junction.

### Author contributions

All authors contributed to the Conceptualization, Formal Analysis, Validation and Writing (original draft).

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### Conflicts of interest

None.

### Ethical considerations

**Protection of humans and animals.** The authors declare that no experiments involving humans or animals were conducted for this research.

**Confidentiality, informed consent, and ethical approval.** The authors have followed their institution's confidentiality protocols, obtained informed consent from patients, and received approval from the Ethics Committee. The SAGER guidelines were followed according to the nature of the study.

**Declaration on the use of artificial intelligence.** The authors declare that no generative artificial intelligence was used in the writing of this manuscript.

## References

1. Lamant L. Cas n° 3. Pityriasis lichénoïde. Ann Pathol. 2025 Mar 3. doi: 10.1016/j.annpat.2025.02.002.
2. Fatturi AL, Morgan MAP, Markus JR, Noguera-Morel L, Carvalho VO. Pityriasis lichenoides: assessment of 41 pediatric patients. J Pediatr (Rio J). 2024;100(5):527-532.
3. Clarey DD, Lauer SR, Trowbridge RM. Clinical, Dermatoscopic, and Histological Findings in a Diagnosis of Pityriasis Lichenoides. Cureus 2020 12(6): e8725.
4. Chen Y, Zhao M, Xiang X, Wang Z, Xu Z, Ma L. Eritromicina oral em pitiríase liquenoide crônica e pitiríase liquenoide e varioliforme aguda. Dermatol Ther. 2020 maio; 33(3):e13311. https://doi.org/10.1111/dth.13311
5. Hrin ML, Bowers NL, Jorizzo JL, Feldman SR, Huang WW. Methotrexate for pityriasis lichenoides et varioliformis acuta (Mucha-Habermann disease) and pityriasis lichenoides chronica: A retrospective case series of 33 patients with an emphasis on outcomes. J Am Acad Dermatol. 2022;86(2):433-437.
6. Musiek A. Pityriasis lichenoides chronica [Internet]. UpToDate; [updated Mar 2025; cited 2025 Apr 2]. Available from: https://www.uptodate.com/contents/pityriasis-lichenoides-chronica