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CASE REPORT

Confluent and reticulate papillomatosis of Gougerot-Carteaud treated with azithromycin with excellent results

Papilomatose confluente e reticulada de Gougerot-Carteaud tratada com azitromicina com excelente resultado

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Abstract

Confluent and reticulated papillomatosis (CRP) of Gougerot and Carteaud is a rare dermatological condition characterized by diffuse papillomatosis with a reticulated and confluent pattern. It is more commonly observed in individuals with darker skin and can cause significant aesthetic and psychological discomfort due to its persistent and expansive lesion patterns. This condition is often resistant to conventional treatments, making the search for alternative therapies an area of interest. We present a case of CRP treated with azithromycin, highlighting the efficacy and safety of this antibiotic in managing the condition.

Keywords: Gougerot. Carteaud. Papillomatosis. Reticulate. Treatment. Diagnosis.

Resumo

A Papilomatose Confluente e Reticulada de Gougerot e Carteaud é uma condição dermatológica rara caracterizada por uma papilomatose difusa com padrão reticulado e confluente. É mais comumente observada em indivíduos de pele escura e pode causar desconforto estético e psicológico significativo devido ao seu padrão de lesões persistentes e expansivas. Esta condição é frequentemente resistente ao tratamento convencional, tornando a busca por terapias alternativas uma área de interesse. Apresentamos um caso de Papilomatose Confluente e Reticulada tratada com azitromicina, destacando a eficácia e segurança deste antibiótico na gestão da condição.

Palavras-chave: Gougerot. Carteaud. Papilomatose. Reticulada. Tratamento. Diagnostico.

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Introduction

Confluent and reticulated papillomatosis (CRP) of Gougerot and Carteaud is a rare dermatosis characterized by hyperpigmented papules with a slightly verrucous surface, which tends to coalesce into a reticulated pattern. This condition predominantly affects young individuals, with a higher prevalence in women and people with darker skin tones[1]. The lesions are commonly located on the upper trunk, particularly in the interscapular, sternal, and inframammary areas, but may extend to the neck and other regions.

Although the exact etiology of CRP is not yet fully understood, genetic, environmental, and hormonal factors are believed to play significant roles. The disease is chronic and usually asymptomatic, although some patients may report mild pruritus in the affected areas[2]. Histologically, CRP is characterized by acanthosis, papillomatosis, and mild hyperkeratosis without significant inflammatory changes.

The diagnosis is generally clinical, based on the characteristic appearance of the lesions. Dermoscopy and skin biopsy can be helpful in atypical cases to confirm the diagnosis and rule out other pigmented dermatoses, such as acanthosis nigricans and pigmented lichen planus[3]. Treatment options for CRP include topical agents, such as retinoids and keratolytics, as well as systemic therapies for more extensive cases, although treatment response can be variable, and recurrence is common.

Azithromycin, a macrolide widely used in bacterial infections, has shown potential for improving CRP symptoms due to its ability to modulate the inflammatory response. Studies and case reports have demonstrated that azithromycin can provide significant relief of papillomatous lesions and improve the quality of life of patients affected by this condition[4].

In this context, this study reviews the use of azithromycin in the treatment of CRP of Gougerot and Carteaud, highlighting its efficacy and outcomes in patients who did not respond adequately to conventional therapies. The approach aims to provide a comprehensive perspective on the effectiveness of azithromycin as a therapeutic alternative for managing this challenging dermatological condition.

Case report

A 19-year-old obese male patient presented with a 3-year history of brownish plaques, initially appearing on the anterior trunk and progressively spreading to the back, neck, and cubital fossae. The patient denied pruritus, pain, or other associated symptoms, as well as any prior treatments. On dermatological physical examination, plaques composed of punctate, brownish papules, confluent at the center with a reticulated peripheral pattern, were observed on the anterior and posterior neck, intermammary region, epigastrium, back, and bilateral cubital fossae (Figs. 1A and B).

The primary diagnostic hypothesis was CRP of Gougerot-Carteaud. Treatment was initiated with azithromycin 500 mg orally once daily for three consecutive days per week, with a pause for the remaining days, over a total duration of 6 weeks. The condition showed complete resolution within 3 months (Fig. 2A). The patient was followed for a period of approximately 12 months, without recurrences.

Discussion

Conventionally, the management of CRP involves the use of topical treatments, such as retinoids and keratolytics, but the response to these therapies can be inconsistent, with frequent recurrences[3]. In recent years, azithromycin, a macrolide antibiotic, has emerged as an effective option for the treatment of CRP, likely due to its anti-inflammatory and immunomodulatory properties, in addition to its antimicrobial activity. The use of azithromycin in intermittent doses has shown promising results, with reports of significant clinical improvement in patients refractory to other forms of treatment[4].

Studies suggest that azithromycin may reduce inflammation and inhibit bacterial proliferation, which hypothetically could contribute to the pathogenesis of CRP. Furthermore, azithromycin's prolonged action, due to its long half-life, allows for convenient dosing regimens, such as weekly administration, improving treatment adherence[4].

A study conducted by Engin et al. reported that patients treated with azithromycin experienced significant improvement in skin lesions after a short treatment period, with few side effects. This makes azithromycin an attractive alternative, especially in cases where topical treatments are ineffective or poorly tolerated. However, it is important to note that treatment responses may vary, and recurrence, though less common, can still occur, suggesting the need for long-term follow-up[4].

Other case studies report successful treatment of CRP of Gougerot-Carteaud with azithromycin. In Brazil (2008), a 28-year-old male patient was treated with 500 mg of azithromycin for three consecutive days in weekly cycles for six weeks, showing satisfactory

Figure 1. A: brownish papules, more grouped in the center and scattered on the periphery, located on the anterior trunk of an untreated patient. **B:** brownish papules, more grouped in the center and scattered on the periphery, located on the posterior trunk of an untreated patient.

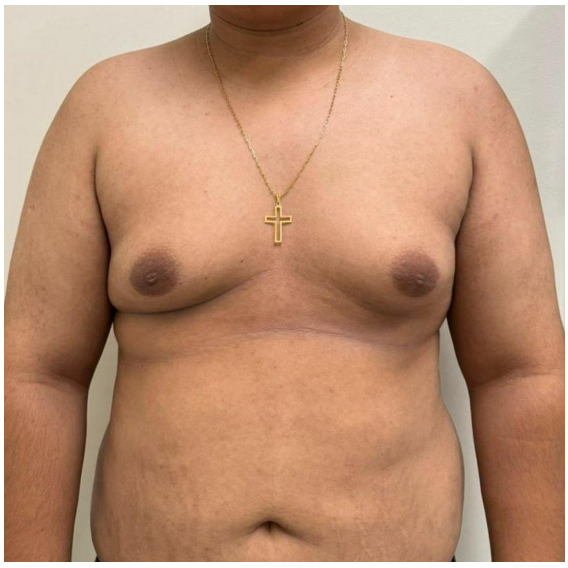

Figure 2. Anterior trunk without papulomatosis lesions, after treatment with azithromycin.

improvement[5]. In 2021, another Brazilian case involving a 19-year-old male patient treated with CRP with the same regimen combined with topical urea and ammonium lactate, resulting in complete remission after 8 weeks[6]. In Turkey (2013), a 16-year-old female patient used 250 mg of azithromycin daily for 12 days, with significant improvement in lesions and no recurrence after 3 months[7].

Conclusion

Despite promising results, the use of azithromycin for CRP still requires further controlled studies to establish its long-term efficacy and determine the optimal dosage regimen. Moreover, since the exact mechanism by which azithromycin benefits CRP patients is not fully understood, additional research is necessary to better understand the disease's pathophysiology and optimize therapeutic approaches[8,9].

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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. Jacyk WK. Confluent and reticulated papillomatosis of gougerot and carteaud in blacks. Int J Dermatol. 2004;43:444-7.
2. Gougerot H, Carteaud A. Papillomatose pigmentée innominée. Bull Soc Fr Dermatol Syphiligr. 1927;34:719-21.
3. Abreu Velez AM, Howard MS. Diagnosis and treatment of confluent and reticulated papillomatosis: a comprehensive review. J Am Acad Dermatol. 2010;62:145-53.
4. Engin B, Kutlubay Z, Serdaroglu S, Tüzün Y. Azithromycin in the treatment of confluent and reticulated papillomatosis. J Am Acad Dermatol. 2002;46:521-4.
5. Carneiro FA, Dias LM, Da Silva AC. Papilomatose confluente e reticulada de gougerot-carteaud: relato de Caso. Rev Para Med. 2008;22:63-8.
6. DE SMMSC, Piauilino BCN, Lima CDS, Portela LP, Oliveira MBDM, Lima LAN. Papilomatose confluente e reticulada de Gougerot-Carteaud: desafio diagnóstico e sucesso terapêutico com azitromicina. 2021.
7. Koçak AY, Akay BN, Heper AO. Confluent and reticulated papillomatosis of gougerot and carteaud: a case treated with azithromycin. J Ankara Univ Fac Med. 2013;66:79-82.
8. Rogers NL, Hsu S. The role of antibiotics in treating cutaneous papillomatosis: a case study. J Clin Aesthet Dermatol. 2018;11:21-5.
9. Ferreira LM, Diniz LM, Ferreira CJM. Papilomatose confluente e reticulada de Gougerot e Carteaud: relato de três casos. Anais Brás Dermatol. 2009;84(1):78-81.