Case Report

A Case of Confluent and Reticulated Papillomatosis Developed During Interferon-α Treatment and Treated Successfully with Amoxicillin

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Abstract

Background: Confluent and reticulated papillomatosis is a rare skin disease that is clinically characterized by small erythematous papules evolving into persistent, hyperkeratotic, confluent and reticulated macules. Here, a case of confluent and reticulated papillomatosis developed during interferon-α treatment and treated successfully with amoxicillin was presented.

Introduction

Confluent and reticulated papillomatosis (CRP) was first described by Gougerot and Carteaud [1] and is a rare skin disease that is clinically characterized by small erythematous papules evolving into persistent, hyperkeratotic, confluent and reticulated macules. Sites of predilection are the neck, interscapular region, intermammary area and the abdomen [2]. We presented a case of confluent and reticulated papillomatosis developed during interferon-α treatment and treated successfully with amoxicillin.

Case Report

An 18-year old girl with a history of a hyperpigmented eruption that started one year ago and involved lateral aspect of the trunk with extension to the gluteal region was seen in the outpatient clinic. Her past medical history was remarkable for hepatitis B infection which had been treated with interferon-α 2a (INF-α 2a). This eruption began in the 6th month of INF therapy. Although INF therapy discontinued 6 months ago, the eruption was still present then on. Dermatological examination disclosed hyperpigmented, well-demarcated, confluent and reticulated macules on lateral aspect of the trunk (Figure 1) spreading to the gluteal region (Figure 2). Wood's lamp examination and potassium hydroxide preparation were negative. Laboratory evaluations including a complete blood count and blood biochemistry studies were within normal limits. Histopathological examination of a skin biopsy specimen showed hyperkeratosis and increased melanin in the basal cells. Additionally, papillomatosis and a mild perivascular inflammatory infiltrate were seen in the dermis (Figure 3). With these clinical and histopathological findings, the diagnosis of confluent and reticulated papillomatosis was made. Since the tetracyclines have well-known effects of hepatotoxicity, the patient was initially treated with oral amoxicillin 2 gr/day for 2 weeks with complete response and no recurrence during 8 months of follow-up period.
Discussion

Although a significant number of CRP cases have been reported, the etiology still remains obscure. Familial cases have been reported [3]. Moreover, the prominent hypotheses include an abnormal host response to fungi and a possible disorder of keratinization [4]. Recently, Jant et al.[5] have reported 6 cases of CRP treated with various antibiotics suggesting that bacteria may play a role in the pathogenesis of this disease. Amoxicillin is the treatment of choice in this patient, considering the risk of hepatotoxicity associated with tetracyclines. To the best of our knowledge, there was only one case of CRP who showed dramatic improvement with amoxicillin therapy and was resistant to minocyclines in the English literature [6].

Interferons are a family of secretory glycoproteins which have been used in the treatment of a wide range of diseases due to their immunomodulatory, antiviral, antitumoral and antiproliferative effects. Although the most common side effects are flu-like symptoms, fever, chills, nausea, vomiting and diarrhea, cutaneous side effects like extensive psoriasis [7], injection side reactions [8], maculopapular eruption [9], vitiligo [10], and lichenoid eruption [11] associated with IFN therapy have also been documented. The mechanism by which IFN triggers the CRP development is not known. Abnormal host response to fungi and/or bacterial colonization of the skin by IFN therapy may be the possible explanations. Since this is the first report on this association further observations are needed to determine the clinical relevance and the possible etiologic factors.

References

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References


