Journal of the Turkish Academy of Dermatology
eISSN 1307-394X

Case Report

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

Berna Aksoy*, MD, Aslı Hapa**, MD, Ömer Hilmi Alga***, MD, Müzeyyen Astarcı****, MD, Hüseyin Üstün****, MD

Address: *Private Konak Hospital, Dermatology Clinic, Kocaeli, Turkey; **Bolu Izzet Baysal State Hospital, Dermatology Clinic, Bolu, Turkey; **Hacettepe University, Faculty of Medicine, Department of Dermatology, Ankara,Turkey; ***Private Konak Hospital, Infectious Diseases Clinic, Kocaeli, Turkey; ****Ankara Training and Research Hospital, Pathology Clinic, Ankara, Turkey

E-mail: draltaykan@yahoo.com

* *Corresponding Author:* Dr. Aslı Hapa, Hacettepe University, Faculty of Medicine, Department of Dermatology, 06100, Sıhhiye, Ankara/Turkey

Published:
J Turk Acad Dermatol 2011; **5 (1)**: 1151c2.
This article is available from: http://www.jtad.org/2011/1/jtad1151c2.pdf
Key Words: confluent and reticulated papillomatosis, interferon

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 amoxicilline 2 gr/day for 2 weeks with complete response and no recurrence during 8 months of follow-up period.

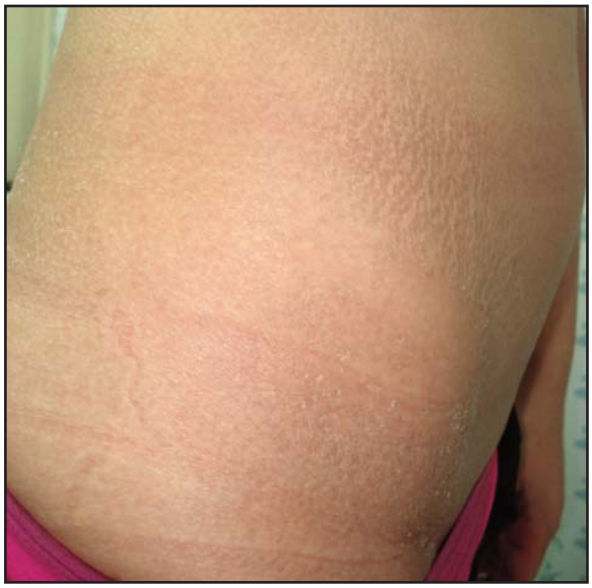

Figure 1. Hyperpigmented, well-demarcated, confluent and reticulated macules presenting on lateral aspect of the trunk spreading to the gluteal region

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**].

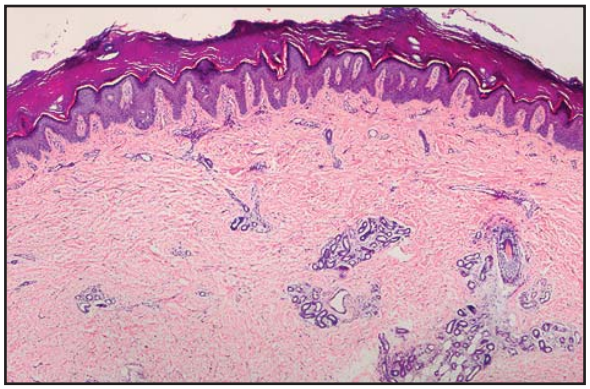

Figure 3. Hyperkeratosis, increased melanin in the basal cells, papillomatosis and a mild perivascular inflammatory infiltrate were present in the dermis (*Hematoxylin and Eeosin* X 40)

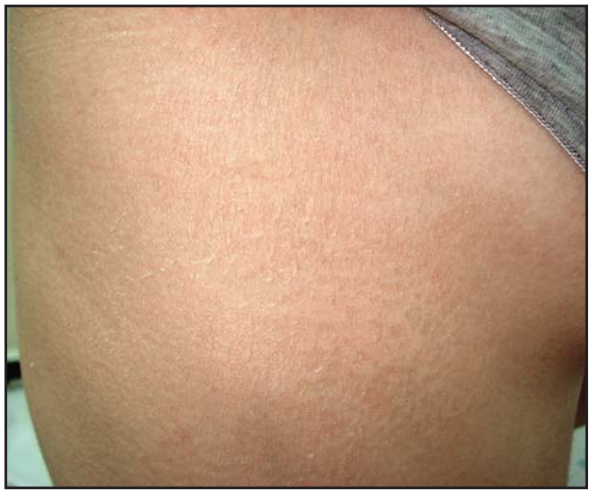

Figure 2. Hyperpigmented, well-demarcated, confluent and reticulated macules spreading to the gluteal region

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

1. Gougerot H, Carteaud A. Papillomatose pigmentée innominée. Bull Soc Fr Dermatol Syph 1927; 34: 719-721.
2. Bowman PH, Davis LS. Confluent and reticulated papillomatosis: response to tazarotene. J Am Acad Dermatol 2003; 48: 80-81. PMID:12734485
3. İnalöz HS, Patel GK, Knight AG. Familial confluent and reticulated papillomatosis. Arch Dermatol 2002; 138: 276-277. PMID: 11843664
4. Mutasim DF. Confluent and reticulated papillomatosis without papillomatosis. J Am Acad Dermatol 2003; 49: 1182-1184. PMID: 14639415

5. Jang HS, Oh CK, Cha JH, Cho SE, Kwon KS. Six cases of confluent and reticulated papillomatosis alleviated by various antibiotics. J Am Acad Dermatol 2001; 44: 652-655. PMID: 11260541

6. Davis RF, Harman KE. Confluent and reticulated papillomatosis succesfully treated with amoxicillin. Br J Dermatol 2007; 156:583-584. PMID: 17300258

7. Citro V, Fristachi R, Tarantino G. Extensive psoriasis induced by pegylated interferon: a case report. J Med Case Reports 2007; 1:86. PMID: 17875206

8. Cnudde F, Gharakhanian S, Luboinski J, Dry J, Rozenbaum W. Cutaneous local necrosis following interferon injections. Int J Dermatol 1991; 30:147. PMID: 2001907

9. Dereure O, Raison-Peyron N, Larrey D, Blanc F, Guilhou JJ. Diffuse inflammatory lesions in patients treated with interferon alfa and ribavirin for hepatitis C: a series of 20 patients. Br J Dermatol 2002; 147: 1142-1146. PMID: 12452863

10. Le Gal FA, Paul C, Chemaly P, Dubertret L. More on cutaneous reactions to recombinant cytokine therapy. J Am Acad Dermatol 1996; 35: 650-651. PMID: 8859310

11. Manjon-Haces JA, Vazquez-Lopez F, Gomez-Diez S, Hidalgo-Garcia A, Perez-Alvarez R, Soler-Sanchez T, et al. Adverse cutaneous reactions to interferon alfa-2b plus ribavirin therapy in patients with chronic hepatitis C virus. Acta Derm Venereol 2001; 81: 223. PMID: 11558891