

Pityriasis Rosea Associated with Pegylated Interferon Alfa and Ribavirin Treatment in a Patient with Chronic Hepatitis C

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ABSTRACT

Background: Pityriasis rosea is an acute inflammatory skin disease that the etiology is unknown but some viral agents like human herpes virus-6 and 7 and drugs are suspected.

Case report: A 58-year-old man with chronic hepatitis C was being followed up in our hospital. Pegylated interferon (PEG-IFN) alfa-2b (100 µg per week) and ribavirin (1000 mg/day) was started. In the third month of this treatment, the patient was diagnosed with pityriasis rosea (PR), which was confirmed by skin biopsy. PEG-IFN alfa-2b treatment for chronic hepatitis C was maintained and no therapy was given for PR. The lesions spontaneously improved within 5 weeks.

Conclusion: Interferon and ribavirin have several cutaneous side effects. Our case is the first case of PR, emerged in a patient with chronic hepatitis C while receiving PEG-IFN alfa 2b and ribavirin.

Key Words: Pityriasis rosea, chronic hepatitis C, ribavirin, pegylated interferon alfa-2b

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Introduction

Interferon (IFN) alfa is used in combination with ribavirin in the treatment of chronic hepatitis C (1). Both IFN and ribavirin have many side-effects in different parts of the body. Cutaneous side-effects at the injection site and dermatological diseases such as lichen planus (2, 3), vitiligo (4), psoriasis, leukoclastic vasculitis, lupus erythematosus (5, 6) cutaneous sarcoidosis (7), eczematoid drug reaction, and trichomegaly (8) have been reported for IFN alfa therapy. Other IFN-based cutaneous side-effects that have been reported in Turkey include cutaneous necrosis in the injection side (9), vitiligo, and hyperpigmentation (10). We report a case of chronic hepatitis C with pityriasis rosea (PR) that was confirmed by skin biopsy in the third month of pegylated interferon (PEG-IFN) alfa-2b (Pegintron®, Schering Corporation, Whitehouse Station, NJ, USA) and ribavirin (Rebetol®, Schering-Plough Products, Puerto Rico, Puerto Rico) therapy.

Case Report

A 58-year-old man with chronic hepatitis C was referred to Ankara Atatürk Education and Research Hospital in October 2006. He was followed up without treatment for 3 years. In April 2010, elevated liver enzyme and a high level of HCV RNA were detected. PEG-IFN alfa-2b (100 µg/week) and ribavirin (1000 mg/day) were started. In the third month of this

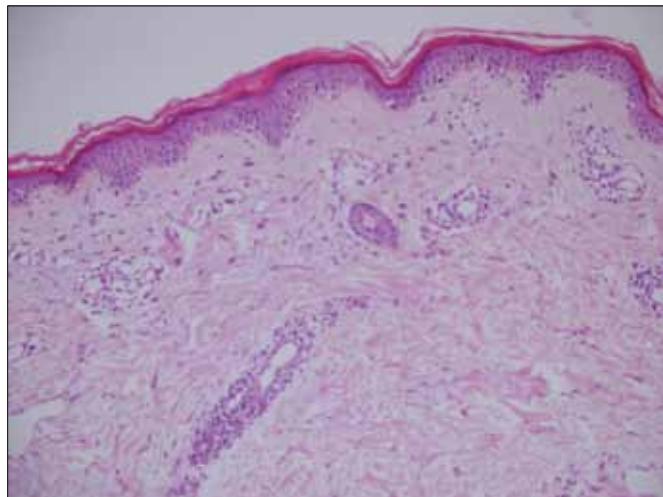


Figure 1. Microscopic appearance of biopsy specimen of skin lesions

treatment, the patient presented with painless skin lesions on his torso that were oval-shaped, salmon pink in colour, and had erythematous borders. The patient had no history of allergies, was not using any other drugs, and had no comorbidities. A skin biopsy was performed and the patient was diagnosed with PR (Figure 1). No therapy was given for PR and PEG-IFN alfa-2b treatment for chronic hepatitis C was maintained. The lesions spontaneously improved within 5 weeks.



Discussion

Pityriasis rosea is an acute inflammatory skin disease and occurs in those aged 15-40 years, especially women, typically in the spring and autumn. The eruption often begins with a single herald patch. Lesions spread rapidly and usually appear on the trunk as a 2-3 cm oval scaly plaque with a salmon-coloured area and a darker erythematous peripheral zone. The herald patch is typically followed 1-2 weeks later by the appearance of numerous smaller, oval, erythematous, scaly and slightly pruritic plaques that tend to occur in a 'Christmas tree' pattern on the trunk and resolve spontaneously within 4-8 weeks. The aetiology is unknown but some viral agents have been suspected, such as human herpesvirus-7 (HHV-7) and human herpesvirus-6 (HHV-6) (11, 12). In addition, some drugs have been found to be the cause of a PR-like eruption. Some of these drugs can be followed as barbiturates, bismuth, captopril, clonidine, imatinib, isotretinoin, levamisole, metronidazole, terbinafine, omeprazole, diphtheria toxoid, and gold (13).

In the literature, there is only one patient in which PR emerged while they were receiving IFN-alpha 2a for Behcet's disease (14). In that patient, on the fourteenth day of IFN treatment, pruritus and a rash on his trunk emerged and the diagnosis of PR was confirmed by skin biopsy. Also, in the course of chronic hepatitis C virus (HCV) infection dermatological conditions such as mixed cryoglobulinemia, porphyria cutanea tarda, and lichen planus have been demonstrated (15). In a patient positive for HCV antibodies, lichenoid lesions were seen after usage of nimesulide (16). It was speculated that HCV positivity might be the cause of the photolichenoid eruption, and nimesulide might have contributed to that process as a photosensitising NSAID. However, the relationship between PR and hepatitis C infection is unclear and there is no case in the literature of PR emerging during the course of chronic hepatitis C infection or during treatment for HCV infection. Treatment of PR is rarely needed. In some cases caution is needed to avoid the possible activation of PR lesions (17). In a study of the efficacy of acyclovir on PR, it was concluded that acyclovir might be more effective than follow-up without treatment in reducing erythema and shortening the duration of PR (18). In another study, ultraviolet A1 phototherapy was thought to be a useful, well-tolerated treatment choice for patients suffering from PR with extensive eruptions and pruritus (19). In our case, no treatment was needed, and after 5 weeks the lesions healed spontaneously, without any modification of the treatment for chronic hepatitis C infection. In conclusion, IFNs have several cutaneous side-effects. Our case is the first of PR emerging in a patient with chronic hepatitis C infection while receiving PEG-IFN alfa-2b and ribavirin.

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