

Successful Treatment of Pruritus in Pregnancy with Broadband UVB Phototherapy

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A 31-year-old pregnant woman with pruritus in pregnancy was described; she presented with a one-week history of generalized pruritus at gestational age 6 weeks without primary skin lesion. She had no dermatologic problem before pregnancy. Her pruritic symptom was not controlled with conventional emollient and topical corticosteroids. Broadband Ultraviolet B(UVB) phototherapy successfully improved her pruritus. UVB phototherapy also worked well after recurrence of pruritus at pregnancy 23rd week. We report herein a case of pruritus in pregnancy successfully treated with broadband UVB phototherapy.

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Key Words : Pruritus, Pregnancy, UVB phototherapy

Itching is one of the common symptoms observed in 3-18% of pregnancies^{1,2}. Except other dermatologic causes of pruritus, the incidence of the specific skin diseases of pregnancy is between 0.5-3%². The specific dermatoses of pregnancy have been classified into four groups: pemphigoid gestationis, polymorphic eruption of pregnancy, prurigo of pregnancy, and pruritic folliculitis of pregnancy^{3,4}. But the present classification of the skin diseases of pregnancy is confusing and unclear owing to an accumulation of clinical descriptions, frequently without biologic or histologic data.

UVB phototherapy (290-320nm) is widely used in the treatment of a variety of skin diseases even in pregnant women⁵⁻⁷.

CASE REPORT

A 31-year-old previously healthy Korean pregnant woman presented with one-week history of generalized pruritus, especially trunk area without preceding skin lesion. She was pregnant for 6 weeks. She had no dermatologic problem before pregnancy. Only excoriation marks on the trunk area were seen on examination. Initially, lukewarm oil bath was recommended and Lcticare[®] lotion and topical corticosteroid(desoximethasone 0.25%) twice a day were prescribed. Two weeks later, she complained of more severe itching without improvement. At that time, she couldn't sleep for longer than 2 hours at night because of pruritus.

The routine laboratory studies including complete blood counts, liver function tests showed normal findings. We tried broadband UVB phototherapy (Waldmann, UV7001K[®]) to control her severe itching. Treatment started at 40mJ/cm² and was given three times a week with successive UVB dosages increased by 10% to 20% as tolerated. During the phototherapy, the patient was recommended to use only bath emollients not topical steroids. Improvement was noted after the 4th

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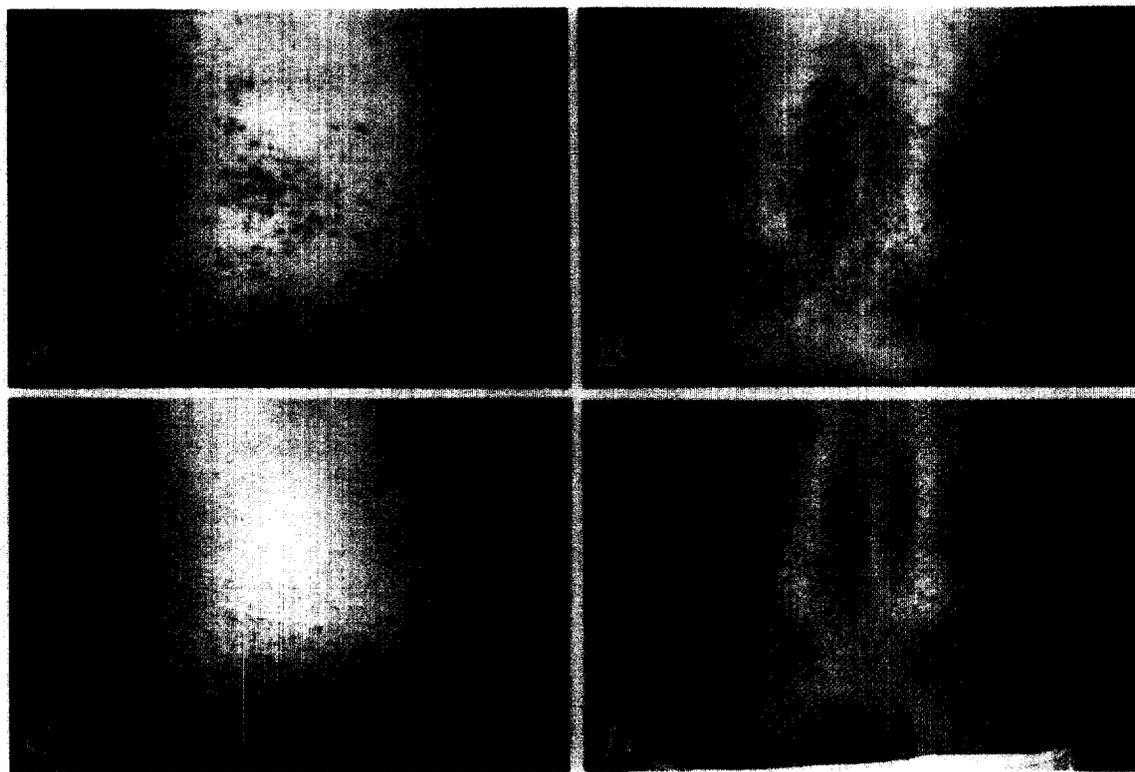


Fig. 1. A&B. At 23 weeks of pregnancy, multiple excoriated papules on the abdomen and back. C&D. Improved skin lesion after seven treatments of UVB phototherapy.

treatment and she could sleep for about 5 hours at night. After ten treatments, her pruritic symptom subsided. She was given three more treatments for maintenance. At gestational age 23 weeks of pregnancy, severe generalized pruritus recurred and multiple excoriated papules were seen on the abdomen (Fig. 1A) and back (Fig. 1B). At that time, routine hematologic work-up was performed, but there was no abnormal findings. Broadband UVB phototherapy restarted and also induced a good response again (Fig. 1C&D).

DISCUSSION

Itching is one of the common symptoms observed in 3-18% of pregnancies^{1,2}. Pregnant women are as susceptible as non-pregnant ones to ordinary skin disorders, but there are skin changes that are unique to pregnancy^{1,4}. Some of these changes, such as melasma and striae, are so common that they are considered to be physiologic

caused by pregnancy, unless they are excessive. Other skin changes may be an exaggerated response to a physiologic adaptation to pregnancy, for example pruritus associated with cholestasis of pregnancy; herpes gestationis etc, systemic disorders such as liver disease, thyroid dysfunction, diabetes, drug eruption, parasites, and malignancy must be ruled out¹⁻⁴. Our patient had no history of dermatologic or systemic disease and her laboratory data of liver function test including serum total bilirubin and transaminase levels were within normal range. Except for secondary excoriations, she had no primary cutaneous lesion. Because of the absence of the primary cutaneous lesion, we first considered her condition as pruritus gravidarum, which may or may not associated with jaundice, and usually appears in the last trimester¹⁻⁴. So our diagnosis was non-specific 'pruritus in pregnancy' based on her early onset of pruritus, absence of primary cutaneous lesion, and normal laboratory data.

Treatment during pregnancy is probably one of the most difficult challenges in clinical practice because it must be both effective for the mother and harmless for the fetus. The main recommendations for the treatment of pruritus during pregnancy are to begin with topical and environmental treatment: emollient bath additives, moisturizing cream, and topical antipruritic agents⁸. If insufficient, systemic treatment may be required. But data concerning drugs and pregnancy are often scarce. Though there are a few drug recommended during pregnancy, not only pregnant women but also physicians might hesitate to use oral medications⁸.

Today, UVB phototherapy is widely used in the treatment of a variety of skin diseases. The therapeutic indications include psoriasis, atopic dermatitis, pityriasis rosea, pityriasis lichenoides acuta and chronica, parapsoriasis, uremic pruritus, and pruritus of undetermined origin⁵. Different from photochemotherapy, UVB phototherapy have been recommended as safe to use in pregnant women⁵⁻⁷. We also tried broadband UVB phototherapy and it worked well. Bernhard⁹ suggested the hypothetical itch factors as 'I factor' causing itching in states as diverse as Hodgkin's disease, pregnancy, and uremia and also suggested that phototherapy might inactivate the itch factor.

In conclusion, we herein presented a case of pruritus in pregnancy, successfully controlled with broadband UVB phototherapy. And if there were no other treatment choice for severe refractory pruritus

in pregnancy, UVB phototherapy may be helpful.

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