Pityriasis rubra pilaris Exacerbated by Ultraviolet B Phototherapy

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Pityriasis rubra pilaris (PRP) has not been described to be aggravated by ultraviolet B (UVB) phototherapy. There are reports of UVB not being helpful, alone or combined with topical crude coal tar; yet no adverse effects were reported [1-3]. We present a case of PRP exacerbated by UVB therapy.

A 65-year-old woman was admitted to the Department of Dermatology because of a generalized psoriasiform eruption of 2 months duration, refractory to topical steroid therapy. Cutaneous examination revealed erythema-tous papules and plaques, some of which were covered with gray-white scales, and some confluence; and yellowish discoloration of the toenails. Laboratory tests, including CBC, SMAC, triglycerides, cholesterol, antinuclear factors, complement, Coombs and latex tests were within normal limits except for elevated ESR and alkaline phosphatase.

The clinical diagnosis was either psoriasis or PRP. A skin biopsy was taken and the patient was started on UVB phototherapy (15 s a day and increasing 15 s daily) combined with topical tar. This, however, caused a severe erythro-dermic reaction and raised the suspicion of PRP which was confirmed by a revision of the skin biopsy specimen.

Histological examination demonstrated psoriasiform epidermis with focal spongiosis and focal parakeratosis in the horny layer with perifollicular accentuation and follicular plugging. Direct immunofluorescence was negative.

Subsequently, the eruption became more confluent with islands of apparently healthy skin, and with follicular accentuation. The patient also developed a seborrheic-like eruption on the face and palmoplantar hyperkeratosis with a yellowish-orange hue. Twenty days after her admission, the patient was started on etretinate 50 mg/day with excellent response within 20 days and she is currently almost free of disease with a maintenance dose of 25 mg every second day.

PRP is a group of more than one entities and a working classification into five types has been suggested [4]. The diagnosis and treatment of PRP was recently exhaustively reviewed by Cohen and Prystowsky [5] and it was concluded that phototherapy, either as a primary or adjuvant measure, has been generally unsuccessful.

Systemic psoralen and ultraviolet A (PUVA) therapy usually exacerbates the condition [4] or causes no benefit [1], although it was rarely reported to be successful [6]. UVB therapy, alone or combined with topical crude coal tar, is not helpful; yet it did not cause an adverse effect [1-3].

Although in a few cases the onset or exacerbation of PRP might have been related to a previous sunburn [7] or to sunlight [3,8,9], to our knowledge this is the first reported case exacerbated by UVB phototherapy. It seems that phototherapy (UVA or UVB) is best avoided in PRP.

References

- Dicken CH: Isotretinoin treatment of pityriasis rubra pilaris. *J Am Acad Dermatol* 1987; 16: 297-301.
- Randle HW, Diaz Perez JL, Winkelmann RK: Toxic doses of vitamin A for pityriasis rubra pilaris. *Arch Dermatol* 1980;116:888-892. Hanny MG: Two cases of pityriasis rubra pilaris. *Proc R Soc Med* 1921;14:70-71. Griffiths WAD, Leigh IM, Marks R: Pityriasis rubra pilaris; in Champion RH, Burton JL, Ebling FJG (eds): *Textbook of Dermatology*, ed 5. Blackwell, Oxford, 1992, pp 1358-1362. Cohen CR, Prystowsky JH: Pityriasis rubra pilaris: A review of diagnosis and treatment. *J Am Acad Dermatol* 1989;20:801-807. Brenner W, Gschnait F, Honigsmann H, Fritsch P: The testing of PUVA in various dermatoses. *Hautarzt* 1978;29:541-544. Knoweles WR, Chernosky ME: Pityriasis rubra pilaris prolonged treatment with methotrexate. *Arch Dermatol* 1970;102:603-612. Griffiths WAD: Pityriasis rubra pilaris – An historical approach. II. Clinical features. *Clin Exp Dermatol* 1976;1:37-50. Beamer JE, Newman SB, Reed WB, Cram D: Pityriasis rubra pilaris. *Cutis* 1972;10: 419-423.