

HALO NEVUS AND ORAL PHOTOCHEMOTHERAPY

Ashok Kumar Khare, Ramachandra V Bendapudi and Gurmohan Singh

Fifteen patients having halo nevus were treated with oral photochemotherapy using psoralens and sunlight. Eleven patients responded to the treatment in 1 to 2 months time. The failure rate was less with early age, shorter duration of lesions and choice of 3, 5, 8 trimethyl psoralens.

Key words: Halo nevus; Oral photochemotherapy.

Halo nevus, also known as Sutton's nevus or leucoderma acquisitum centrifugum is a pigmented nevus that develops a ring of peripheral depigmentation. These are most commonly seen on trunk, especially on the back and can be single or multiple. Sometimes these are seen in association with vitiligo.¹⁻⁴ In 30% of the patients, either vitiligo is present from the time of onset of halo nevus or develops subsequently.⁴ The ultrastructural studies of the depigmented areas have shown complete absence of melanocytes and their apparent replacement by Langerhans cells.⁵ Vasistha⁶ treated seven out of 10 such patients with oral or topical psoralens and solar irradiation. We herein report our observations on 15 such patients who were given oral photochemotherapy using psoralens and sunlight.

Materials and Methods

Fifteen patients having halo nevus were selected for this study. There were 9 males and 6 females with the age ranging from 7 to 24 years. Two patients had two lesions each, while others had a single halo nevus each. The

lesions were present on the forehead, pre-auricular area, pre-sternal area, lower abdomen, scapular area and shoulder. The duration of these lesions ranged from 1 month to 1 year. Four patients had vitiligo lesions also. The family history of vitiligo was present in 2 cases only. Seven patients were prescribed 8-methoxypsoralen (MOP) whereas others were given 3, 5, 8 trimethylpsoralen (TMP) in the dose of 0.6 mg/kg body weight/day. The assignment to the two psoralens respectively was random. The patients were instructed to expose the lesions to sunlight for 30 minutes 2 hours after taking the drug. The patients were followed up at monthly intervals.

Results

Eleven of these patients responded to the treatment. The erythema was followed by appearance of spots of pigmentation in 1 to 2 months time. The time taken for total pigmentation ranged from 6 to 8 months. The associated vitiligo lesions also responded to the treatment simultaneously in a similar manner. There were no side effects of therapy in any patient.

Comments

The pigmented portion of a halo nevus involutes over a period of several months and the peripheral depigmentation may persist for months and even years.⁷ The depigmented portion worries the patient as for vitiligo.

From the Section of Dermatology and Venereology, Institute of Medical Sciences, Banaras Hindu University, Varanasi-221005, India.

Address correspondence to: Dr. Ashok Kumar Khare, Section of Skin and VD, R.N.T. Medical College, Udaipur-313001, India.

Usually, these patients are reassured that these nevi have no significance provided the central pigmented lesion is a benign one.

Nordlund et al² described a patient in whom halo nevi developed as the first manifestation of vitiligo and Vogt-Koyanagi-Harada (VKH) syndrome. They suggested that vitiligo has a variable expression and VKH syndrome exemplifies one end of its spectrum. Since halo nevi are sometimes associated with vitiligo^{1,4} and lack of melanocytes causes depigmentation in both the entities,⁷ a response to photochemotherapy in halo nevi can be expected. In the present study, eleven out of fifteen cases responded well to this treatment in spite of the presence of the central pigmented nevus.

References

1. Sober AJ, Mihm Jr MC, Fitzpatrick TB et al: Malignant melanoma of the skin, and benign neoplasms and hyperplasias of melanocytes in the skin, in: *Dermatology in General Medicine*, Second ed, Editors, Fitzpatrick TB, Eisen AZ, Wolff K et al: Mc Graw-Hill Book Company, New York, 1979; p 629-654.
2. Nordlund JJ, Albert D, Forget B et al: Halo nevi and the Vogt-Koyanagi-Harada syndrome. *Manifestations of vitiligo*, Arch Dermatol, 1980; 116: 690-692.
3. Bleehen SS and Ebling FJ: Disorders of skin color, in: *Text book of Dermatology*, Third ed, Vol 2, Editors, Rook A, Wilkinson DS and Ebling FJG: Blackwell Scientific Publications, Oxford, 1979; p 1377-1431.
4. Ebling FJG and Rook A: Disease of skin color, in: *Text book of Dermatology*, Editors, Rook A et al: Blackwell, Oxford, 1968, p 1111-1152 (quoted from 1).
5. Hashimoto K: Ultrastructural studies of halo nevus, *Cancer*, 1974; 34: 1653-1666.
6. Vasistha LK: Psoralen therapy of leucoderma acquisitum centrifugum, *Ind J Dermatol Venereol Leprol*, 1981; 47: 98-101.
7. Lever WF and Schaumberg-Lever G: Melanocytic nevi and malignant melanoma, in: *Histopathology of the Skin*; Fifth ed, JB Lippincott Company, Philadelphia, 1975; p 654.