VITILIGO AND MYASTHENIA GRAVIS

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Summary

A case of myasthenia gravis developing in a patient with long standing vitiligo is described. It seems to be a hitherto unknown association of vitiligo. The association of the two diseases on the basis of probable autoimmune etiology is brought out. A combination of oral photosensitizer and corticosteroid was effective treatment though the former alone proved abortive. The withdrawal of corticosteroid resulted in depigmentation of repigmented vitiliginous patches, suggesting the important role played by immusnosuppresive therapy in vitiligo based on autoimmune disorder.

Case Report

A 35 years male, attended the dermatologic outpatients clinic for the treatment of vitiliginous patches, which were initially noticed by him on the feet at the age of ten years. These were treated with ayurvedic medicines which caused repigmentation in a couple of years. Twenty years later patient developed depigmentation on the face, lips and dorsae of the hands. On interrogation it was revealed that the appearance of depigmented eruptions coincided with mental upset due to family problems. He was treated with oral trimethylpsoralen (Neosoralen^{R}) in dosage of 10 mg. per day for 14 weeks. Two hours after administration of the drug vitiliginous patches were exposed to early sunshine initially for 10 minutes and later upto 30 minutes. During the course of treatment there was an appearance of persistent erythema but, no appreciable pigmentation was noticed. Subsequently a combined oral therapy of 8-metho xypsoralen (Melanex) in dosage of 20 mg. and triamcinolone (Triamcort $_{R}$) 8 mg. daily, were administered. Exposure of vitiliginous patches to sunlight was done as before. There was considerable improvement in the course of 24 weeks with the combined treatment. The repigmentation of patches was characterised by the appearance of peripheral and/or perifollicular pigmentation. Interestingly the withdrawal of triamcinolone brought on depigmentation of the repigmented areas.

Since June 1968 the patient has been experiencing double vision. The diplopia has been lasting throughout the day so that the patient has to adopt the use of only one eye. The weakness and drooping of the upper eye lids were consistent features appearing after days' fatigue. He was clinically diagnosed as a case of myasthenia gravis; and diagnosis was confirmed by therapeutic testing with intramuscular injections of 1 ml. of standard solution of prostigmin.

On examination the patient had multiple, well defined depigmented macules on the lips, face, dorsa of the hands and

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feet. The general and systemic examination did not reveal any abnormality.

Investigations : The blood haemoglobin was 13.5 gm, the total leucocyte count was 7,100 per cubic millimetre with the differential count; 47 percent neutrophils; 48 percent lymphocytes and 5 percent eosinophils. Erythrocyte sedimentation rate was 18 mm first hour (Wintrobe). Round worms were demonstrated in stools, but no abnormality was detected in the urine. Serum cholesterol was 216 mg. percent and the fasting blood sugar was 119 mg. percent. Serum proteins were 6.3 percent with albumin/globulin of 3.6/2.7. Serum electrolytes were within normal limits. Roentgenogram of the skull and chest were normal. Treatment — The patient has been on the treatment for myasthenia gravis and vitiligo simultaneously. The former condition is at present under control with dosage of 15 mg. of prostigmin daily. Additionally he has been having oral 8-methoxypsoralen (macsoralen®) and betamethasone in dosage of 20 mg. each daily for vitiligo. He has shown a favourable and cosmetically acceptable response to the treatment in the past 16 weeks of therapy.

Discussion

Recently vitiligo has been reported to be associated with thyroid disease [1,2] pernicious anemia[3], carcinoma of the stomach[4], Addison's disease[5], and diabetes mellitus [1,2,6]. Other associations are also on record[7], but its association with myasthenia gravis has not been reported thus far. The development of myasthenia gravis in a patient suffering from long standing vitiligo is interesting for both are incriminated as auto-immune disorders. It is now well recognised that occurrence of one auto-immune disease increases the possibility of developing other auto-immune diseases[8]. Such clinical associations belonging to auto-immune disorders are now well documented[9] in vitiligo. Recent work suggests that vitiligo may be a manifestation of auto-immunity[10,11]. The association of vitiligo and myasthenia gravis is to the best of author's knowledge not hitherto reported.

Furthermore, repigmentation of vitiliginous patches consequent to administration of oral photosensitizer and corticosteroid is probably a pointer to the auto-immune etiology. It needs emphasis that the patient's vitiligo was recalcitrant to treatment with photosensitizer alone. The recurrence of depigmentation of repigmented vitiliginous patches after withdrawal of corticosteroid is further contributory to the concept of auto-immune etiology. The augmented repigmentation may be attributed to the immuno-suppressive action of corticosteroids. It is therefore suggested that such a combination may be adopted for treating recalcitrant vitiligo of auto-immune origin.

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