# A CASE OF DERMATOMYOSITIS RESPONDING TO THREE WEEKS OF TREATMENT WITH METHOTREXATE AND STEROID

# Anandam Kuravi, KS Sridhar, KC Girish, KB Bharath Raj

A case of dermatomyositis in a young girl of 18 years is reported. Though it is generally held that it is a very recalcitrant condition, we found that the patient improved by all parameters to treatment with methotrexate and steroids in three weeks.

key words: Dermatomyositis, Polymyositis.

# Introduction

Of the three connective tissue diseases, dermatomyositis is the least common. Whereas this condition affects skin, muscles and blood vessels, in polymyositis skin manifestations will not be present. It is known to be a very chronic condition, running for years in spite of treatment, finally leading to fatality and surprisingly yet in some with complete remission after many years of morbidity. However, recently we have seen a patient who has improved remarkably in less than 3 weeks of treatment, clinically and investigation wise and we are reporting the same.

# Case Report

A female patient aged 18 years presented with swelling and erythema of upper and lower eye lids, scaling of scalp and follicular and non follicular erythematous papules on limbs. The complaint started 6 months ago as itching and scaling of scalp. After 2 months, she developed erythematous

From the Department of Dermatology and S.T.D. A.I.M.S., B.G. Nagar - 571 448, Mandya District, Karnataka.

Address correspondence to: Dr. Anandarn Kuravi papular lesions of the body and erythema and oedema of eyelids. Simultaneously she developed extreme weakness and difficulty in swallowing.

The patient was sick, pyrexial and there was erythema (heliotrope) and oedema of eye lids. There were grouped erythematous papular lesions on the extremities. In addition there was dystrophy of cuticle of finger nails and scaling of scalp.

Patient was unable to get up, nor could she raise her hands to comb hair. Musculature of shoulder girdle and hip was tender. She could not breath properly and swallowing was difficult.

Her total leucocyte count was 5000/mm³ and ESR 68 mm first h. Her C.P.K. was 981 units per 1L and serum creatinine was 0.67 mg%. SGOT was 147 units per 1L and SGPT was 66 units per 1L L.E cell phenomenon was negative, Muscle biopsy showed changes of myositis. X-rays of chest, elbow and knee joints were normal. Scan of all other systems did not reveal any other abnormality. The patient was

given methotrexate 10mg. once a week and prednisolone 30 mg per day in divided doses.

Within one week after the initiation of treatment, the patient showed remarkable improvement. The muscle pain and tenderness diminished and the patient was able to sit, walk and comb the hair. The dysphagia also diminished though erythema persisted. Generalised erythema and mild oedema of skin diminished. However a few skin lesions and scaling of scalp continued. Patient looked healthy and was apyrexial.

After one week the oral prednisolone intake was gradually reduced and after three weeks it was brought to 10 mg. per day. However methotrexate was continued to be administered as initiated i.e. 10mg. per week.

C.P.K., SGOT, SGPT and 24 hrs. urinary creatinine excretion all touched normal after three weeks and the patient was discharged with an advice to continue prednisolone 10mg, per day and methotrexate 10mg, per/a week for one month and to report for follow up after that.

# Discussion

Our patient was a case of dermatomyositis, without any complications or sequelae like calcinosis<sup>2</sup> nor was it associated with any internal malignancy or other connective tissue disorders.

Scan of the literature shows that C.P.K., SGOI and SGPI return to normal levels in three

to four months and muscle power improves after five months.3 However in the present case they assumed normal levels in three weeks. This might have happened because the diagnosis was made at an early stage of the disease. Further the doses of prednisolone recommended in this case was very high (1-2mg/ Kg body weight) and overall amelioration is said to take minimum six months.3 In contrast to that, the doses and duration was much less in the present case. As regards the prognosis of dermatomyositis, in younger people, there are conflicting views. Whereas certain authors believe that prognosis is better in these cases.1 others hold the view that these subjects are prone for vasculopathy, retinopathy, large bowel infarction, perforation and calcinosis.3 It must be stated that the patient under study. who was 18 years did not have any such features.

This case is reported because of the dramatic response to treatment, contrary to what is usually observed.

### References

- 1. Rowell NR, Goodfield MJO. Connective tissue diseases: Dermatomyositis. In:Textbook of Dermatology, 5th edn. Champion RH, Burton JL, Ebling FJG, editors, Balackwell Scientific Publications, 1992; 2276-2286.
- 2. Wadwasl, Marquis L. Dermatomyositis with calcinosis cutis. Indian J Dermatol Venereol Leprol 1981;47:110-114
- 3. Sontheimer RD, Euwer RL, GEppert TD, et al. Connective tissue diseases: Polymyositis, Dermatomyositis, In: Dermatology, Moschella SL, Hurley HJ editors. WB Saunders company, 1992:1245-1255.