SELF-ASSESSMENT PROGRAMME

A 24 year old female presented in 1975 with multiple red papulonodular lesions present bilaterally symmetrically on the legs. The lesions had been recurrent for the past 4 years, would normally last for 15–20 days and heal with hyperpigmented areas. The patient did not have fever, cough, breathlessness, weakness, headaches, palpitation, or urinary symptoms. She was treated with systemic corticosteroids and had been doing reasonably well till early 1978 when she developed along with multiple nodular lesions, extreme weakness, fall in blood pressure and loss of weight. In the past, she had had redness of the right eye and recurrent blisters of the mouth.

On examination she showed multiple, non-tender, deep subcutaneous nodular lesions present on the legs and the arms. Multiple hyperpigmented macular lesions were also present on the legs. Systemic examination was non-contributory.

A) Which of the following diagnoses is likely?
   1. Nodular vasculitis
   2. Polyarteritis nodosa
   3. Erythema induratum
   4. Behcet's Syndrome
   5. Sarcoidosis

B) List the order in which the following investigations would be helpful :—
   1. Skin biopsy
   2. Total and differential serum proteins
   3. Antinuclear factor (ANF)
   4. Serum Calcium
   5. Mantoux test
   6. X-ray Chest
   7. Kveim's test
   8. X-ray hands

All the investigations were normal at the time of first visit. But a subsequent skin biopsy revealed features of nodular vasculitis.

C) What would be the likely diagnosis now?
   1. Polyarteritis nodosa
   2. Idiopathic nodular vasculitis
   3. Erythema induratum

D) What would be the suggested line of treatment?
   1. Systemic corticosteroids
   2. Antitubercular therapy
   3. Combination of the above two

E) What is the likely prognosis?
   1. Complete restoration of health
   2. Serious illness.

ANSWERS

The painful, tender nodular lesions in the absence of any other systemic component would tend to suggest a diagnosis of nodular vasculitis either of tubercular or of idiopathic origin. Absence of breathlessness or hypertension and abnormalities in the blood and urine would tend to exclude the diagnosis of a connective tissue disease including polyarteritis nodosa. Sarcoidosis is in this country rarely responsible for lesions of nodular vasculitis. The diagnosis of Behcet's syndrome could not be confidently excluded in view of the oral lesions and possible eye lesions. The future course of the disease namely loss of weight, extreme weakness and a low blood pressure would seem to suggest a diagnosis of concurrent tubercular infection including a possible involvement of the adrenal cortices.

(B) The order in which the investigations might be of help would be skin biopsy, x-ray chest, Mantoux test and ANF.

(C) In spite of the skin biopsy showing features of nodular vasculitis, polyarteritis nodosa would seem unlikely for want of any additional systemic abnormalities. Nodular vasculitis secondary to tuberculosis would seem more likely.

(D) A combination of corticosteroids and anti-tubercular therapy should be helpful partly because of the suspected (unproven) nature of vasculitis and partly because some patients with erythema induratum respond to antitubercular therapy even in the absence of any evidence of tuberculosis.

(E) The prognosis though unpredictable, is likely to be good as happens in most patients with nodular vasculitis.

Comment

On the face of it, the patient might seem to be suffering from a common variety of nodular vasculitis - a widely embracing term that indicates nodular vascular lesions mostly on the legs. The importance of studying this patient lies in differentiating the various clinical possibilities based on the associated findings. In the absence of any significant associated symptoms the patient had, till recently, been labelled as idiopathic nodular vasculitis. The loss of weight, feeling of fatigue suggested a concomitant systemic disease; associated with the low blood pressure a diagnosis of a tubercular infection in this country may be presumed. Such indeed has been the experience of certain other workers[1,2]. In certain instances antitubercular therapy continued for several months has given good results. In the absence of any ulcerations it will perhaps be better not to designate this condition as Bazin's form of erythema induration.

References

1. Michael F and Dowling DM : Diagnosis and treatment of erythema induration, Brit Med J, ii, 1109, 1965.
2. Andersen SC : Erythema induration treated with isoniazid, Acta Derm Vener (Stockh), 50 : 63, 1970.

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