Pictorial CME

A Rare Cutaneous Manifestation of Type 2 Diabetes

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A 49 year old lady presented to the outpatient department of medicine for follow up of type 2 Diabetes after 6 months with reports of FBS=236 mg/dl, PPBS=312 mg/dl, glycated haemoglobin (HbA1C) 9.2%. She is a known diabetic for 7 years and was under oral hypoglycaemic agents which she was not taking regularly. She complained of red rashes, non-itching, on both her legs for last 10 days. There was no past history of surgical procedures, undue medicine intake, allergy to drugs or environmental agents. On examination, reddish brown papular rash with erythematous borders, non-tender (Fig 1) with reddish flakes were seen. There was no sign of atrophy or ulceration with preserved sensation without any evidence of diabetic neuropathy.

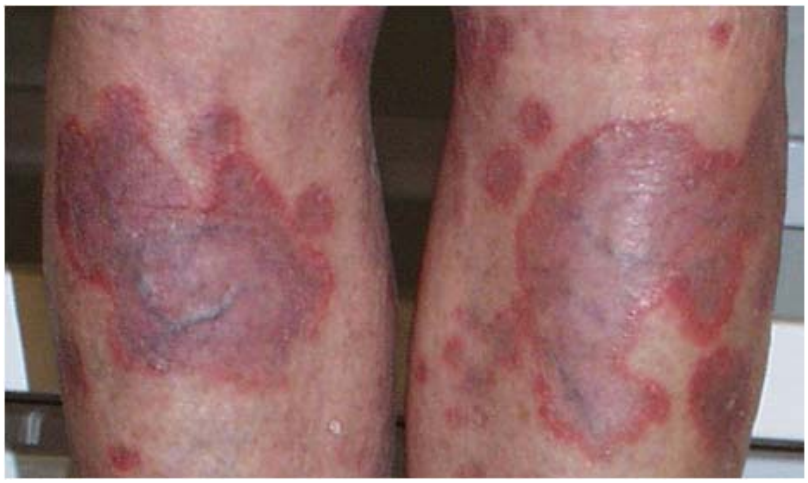

Fig 1

(1) What may be the provisional diagnosis of this presentation?

(2) What is the pathophysiology of this condition?

(3) What is the treatment of this condition?

Answers:-

(1) The characteristic appearance of the rash with preserved vibration perception over both feet, revealing absence of neuropathy in a background of poorly controlled type 2 diabetes is suggestive of NECROBIOSIS LIPOIDICA DIABETICORUM (NLD), a chronic disfiguring condition specially located above tibia, lesions of which may be single or multiple.

(2) Because of the strong relationship between diabetes and NLD, many studies have focussed on diabetic microangiopathy as being the leading etiology. Another theory is based on immunoglobulin deposition in the blood vessels causing an antibody-mediated vasculitis which initiate changes in the blood vessels and subsequent necrobiosis in NLD. Also defective and abnormal collagen fibrils, trauma, inflammatory and metabolic changes, abnormal glucose transport by fibroblasts are some other possible etiologies.

(3) Sometimes the lesions may resolve spontaneously when glycemic control is achieved. At times, it responds to topical cortisone creams with airtight dressings. Cortisone injections can also be used. Trauma should be avoided by protection of legs with stockings. Inhibition of platelet aggregation by a combination of Aspirin and Dipyridamole was proposed as the treatment for NLD. Stanozolol, an anabolic steroid with fibrinolytic activity and inositol nocotinates, a vasodilator, can be beneficial for NLD with slow improvement.

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References

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