CUTANEOUS POLYARTERITIS NODOSA

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A 50-year- old man developed 3 ulcers on the right forearm and one on buttock with well-defined bluish edges, hyperaemic floor studded with yellowish granulation tissue, serous discharge and peripheral papulonodular lesions fixed to underlying tissues. There was off and on fever, myalgia and neuropathy. Skin-colored mobile nodules (1.5x2 cm each) were present, one each on left shoulder and right thigh. Biopsy revealed endothelial proliferation and infiltration of vessel wall with neutrophils along with marked perivascular infiltrate of neutrophils and admixture of macrophages, lymphocytes and plasma cells. Fibrinoid deposits in vessel walls, extravasation of RBCs and necrosis of dermis were also present. Histopathology confirmed clinical diagnosis of cutaneous polyarteritis nodosa (CPN). Patient responded excellently to 50mg of dapsone tid for 4 weeks.

Key words : Polyarteritis nodosa, Vasculitis

Introduction

Cutaneous polyarteritis nodosa (CPN) is a benign, recurring chronic distinct entity characterised by symptomless/painful crops of 2-3 cm size cutaneous nodules around bluish sharply marginated big ulcers on feet, legs, forearms, trunk and shoulders. It may be accompanied by livedo reticularis, fever, myalgia, arthralgia and neuropathy.[1-3] There is no visceral involvement unlike periarteritis nodosa, hence has a good prognosis.[4] The disease responds to dapsone. First case of CPN was reported by us in Indian literature in 1987.[5]

Case Report

A - 50-year-old man was admitted with ulcers on the right forearm (Fig.1) and buttock since one month. The ulcers on right forearm were 3 in number, 1x0.75 cm and 1.5x4.5 cm in size with well-defined bluish margins, hyperaemic floor studded with yellowish granulation tissue and serous discharge. Periphery of ulcers revealed multiple skin coloured, smooth surfaced, slightly painful, tender, 1-4 cm in size papulonodular lesions which were attached to underlying structures. Right forearm could not be extended fully. There was restriction of movements at

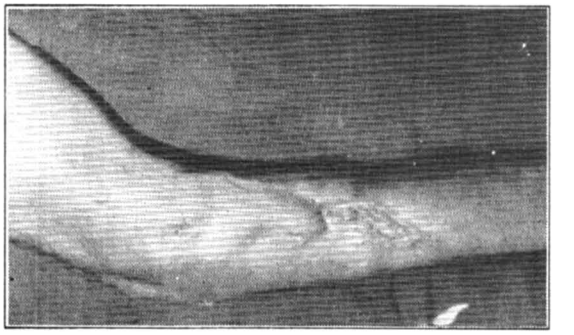

Fig. 1. Three well-defined ulcers with bluish margins, hyperaemic floor, yellowish granulation, serous discharge and peripheral multiple, skin coloured, fixed nodules on right foreearm are visible.

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right elbow joint. Buttock lesion was similiar to forearm lesions. In addition there were skin-coloured slightly painful, tender mobile nodules 1.5x2 cm one each on the left shoulder and right thigh. The nodules did not break. There was off and on fever, myalgia and neuropathy over upper and lower limbs with discrete, well-defined areas of hypoaesthesia. Patient was put on dapsone 50mg tid. Patients improved and in three weeks time the ulcers were reduced to one-third in size.

Routine investigations were normal. ESR was 24 mm Ist hour. X-ray of elbow showed periosteal thickening and new bone formation. Histopathology showed prominent vasculitis as thickened blood vessels due to fibrinoid deposits, with proliferation of endothelial cells and perivascular infiltrate consisting of neutrophils with admixture of lymphocytes, plasma cells and macrophages. At places the vessel wall was infiltrated with neutrophils. The dermal collagen looked eosinophilic and swollen with evident areas of necrosis and extravasation of RBCs.

Discussion

The present case was clinically diagnosed as a case of CPN as he had multiple, tender sharp ulcers with well defined bluish margins surrounded by skin-coloured variable sized, papulo-nodular lesions, mononeuritis multiplex, fever and myalgia. Patient was being treated with systemic steroids and antibiotics before admission without any beneficial effect. We also continued the same treatment till histopathology report and noticed only marginal improvement with the above therapy. Patient responded dramatically to dapsone 50mg thrice daily.

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