Normolipemic Xanthomas in a Patient with Underlying Plasma Cell Dyscrasia

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Plasma cell dyscrasias usually present with “CRAB” criteria of hypercalcemia, renal insufficiency, anemia, and lytic bone lesions. We describe a 66-year-old Caucasian gentleman who presented with a 3-month history of increasing yellow plaques in bilateral axillae and groin. Laboratory investigation revealed total cholesterol of 172 mg/dL, triglycerides of 37 mg/dL, HDL of 70 mg/dL and LDL of 95 mg/dL. Hemoglobin was 13.8 g/dL, calcium was 8.9 mg/dL, creatinine of 0.89 mg/dL. Punch biopsy of the skin revealed mononuclear cell infiltrate with numerous foamy histiocytic cells consistent with xanthoma. The pathologist recommended evaluation for plasma cell dyscrasia in light of normal cholesterol. Further testing demonstrated an IgG lambda monoclonal protein of

2.1 g/dL and kappa/lambda serum free light chain ratio of 0.56. A bone marrow biopsy revealed 20% IgG lambda clonal plasma cells. There was no evidence of lytic lesions on radiographs giving a diagnosis of smoldering myeloma. Treatment was deferred in light of no end organ damage. Since patient was not bothered by plaques, he was observed twice yearly (Fig. 1).

Diffuse plane normolipemic xanthomatosis (DPNX) is a rare cutaneous entity that is associated with underlying hematologic malignancies, particularly monoclonal gammopathies [1]. The exact pathophysiology behind the interaction between lipoproteins and paraproteins is not well understood. It is postulated that monoclonal antibodies interact with LDL, forming an abnormal Ig-LDL complex that is scavenged by macrophages and deposited in skin causing xanthomas [2].

We wanted to highlight this rare presentation of plasma cell dyscrasia manifesting as normolipemic xanthomas.

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Fig. 1 Right axilla demonstrating xanthoma (left), right inguinal fold showing xanthoma (right) the contralateral side showed similar findings

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Human and Animal Rights This study does not contain any participants with human/animal participants. The patient consented to the photographs in the article.

References

1. Marcoval J, Moreno A, Bordas X, Gallardo F, Peuri J (1998) Diffuse plane xanthoma: clinicopathologic study of 8 cases. *J Am Acad Dermatol* 39(3):439–442
2. Akhyani M, Danespazhooh M, Seirafi H, Naraghi ZS (2001) Diffuse plane xanthoma in an otherwise healthy woman. *Clin Exp Dermatol* 26(5):405–407