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Research Article

XANTHOMAS OF MIXED MORPHOLOGY

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A B S T R A C T

Xanthomas develop in the skin due to deposition of lipids in dermis, primarily in macrophages, but it can also be present intracellularly. Xanthomas may develop in association with primary or secondary disorder of lipid metabolism. Thus, early recognition of these lesions can have a significant impact on the diagnosis, management, and prognosis of patients who suffer from an underlying disease. Here we report this case to highlight the importance of recognizing dermatological clues to elevated lipid levels in view of initiating early treatment with lipid lowering agents.

INTRODUCTION

Cutaneous xanthomas can signal the presence of an underlying hyperlipidemia or monoclonal gammopathy , major forms being eruptive, tuberous, tendinous and plane. Tuberous xanthomas present as pink–yellow papules or nodules on extensor surfaces, especially the elbows and knees and may exceed 3 cm in diameter. It can be seen in hypercholesterolemic states such as dysbetalipoproteinemia (frederickson type iii) and familial hypercholesterolemia (frederickson type ii). Exact mechanism of xanthoma formation is yet to be understood but are thought to result from the permeation of circulating plasma lipoproteins through dermal capillary blood vessels followed by phagocytosis of the lipoproteins by macrophages thus forming foam cells.

Case description: This is a case of a 19 years old female who presented with skin coloured to yellowish and dark raised lesions over right upper eyelid, bilateral arms and forearms, lower limbs since 4 years. Lesions on upper thighs bilaterally were painful on pressure. Lesions were insidious in onset and gradually progressive. General and systemic findings were unremarkable. Cutaneous examination revealed multiple yellowish macules and papules over bilateral upper limbs, bilateral knees, over extensor aspect and well defined hyper pigmented nodules with firm consistency over bilateral upper thighs laterally and on left elbow. On further investigation serum total cholesterol level was elevated. Other haematological parameters were normal. Skin biopsy showed atrophic squamous lining with scanty subepithelial tissue , deeper area composed of macrophages with clear cytoplasm, cleft like spaces (cholesterol) along with few foreign body giant cells. Usually touton giant cells are commonly seen in cases of xanthoma.

CONCLUSION

This case illustrates features of eruptive, tuberous, plane xanthomas proven by biopsy. It is being reported for varied morphological presentation of xanthomas in a single patient and to emphasize the importance of cutaneous findings to initiate early treatment and prevent life-threatening complications.

Well defined hyperpigmented nodules with firm consistency over bilateral upper thighs laterally

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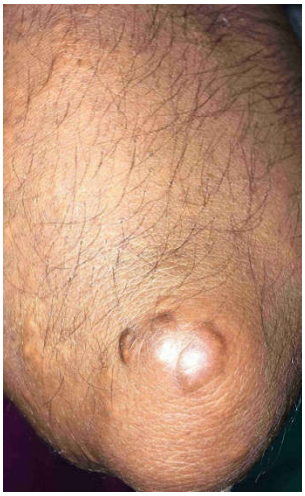
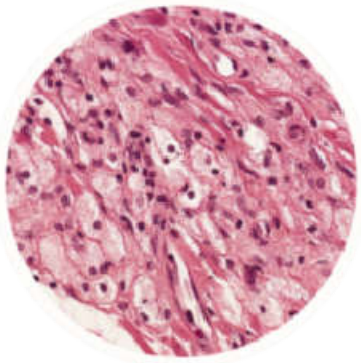
Yellowish papule over right upper eyelid

Multiple yellowish plane topped plaques over flexor aspect of left forearm



Multiple yellowish to hyperpigmented nodules over left elbow with yellowish plane topped papules and plaques over extensor aspect of proximal forearm

H and E x10 View showing atrophic squamous lining with scanty subepithelial tissue. Deeper area composed of macrophages with clear cytoplasm. Cleft like spaces (cholesterol) along with few foreign body giant cells



H and E x40 View showing xanthoma cells

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