TUBERO-ERUPTIVE XANTHOMA: A CASE REPORT

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ABSTRACT
Xanthoma is a deposition of lipid in the soft tissues. It is an uncommon presentation of metabolic disorder of lipids. A case of 55 years old male was reported and the patient presented with multiple xanthomas over extensor aspect of knees, thighs, forearms, elbows and back. His investigations revealed normal lipid levels along with normal fasting and post-prandial blood sugar levels. A work-up for cardiovascular involvement was normal and the biopsy from one of the nodules showed xanthoma cells. Despite normal lipid levels, lipid lowering drugs were started and some improvement was noticed two months after initiation of therapy.

KEYWORDS: Tubero-eruptive xanthoma, Hyperlipidaemia, Xanthoma, Xanthomatosis.

INTRODUCTION
Xanthomas are found as an uncommon presentation of generalized or localized disturbance of lipid metabolism.¹ It is associated with lipid deposits in tissue of skin, tendons and eyes.² Eruptive xanthoma usually presents with small yellowish-orange to reddish brown papules that appear in crops over the entire body favoring locations such as buttocks, extensor surface of arms, thighs, knees, inguinal and axillary folds.² Tuberos xanthoma is characterized by asymptomatic firm, yellow or orange, indurated nodules, papules to lobulated tumors often with an erythematous halo having tendency to coalesce which occurs on the face, buttocks and extensor aspect of the limbs.¹ Here, we have presented an atypical case report of tubero-eruptive xanthoma.
CASE REPORT

A 55 years unmarried male from India presented to Dematology Out-Patient Department (OPD) of National Medical College with multiple asymptomatic eruptions over extensor aspect of upper limbs, lower limbs and back. Initially the patient noticed 2-3 pea sized reddish to skin colored papules on the extensor aspect of lower limbs (Figure 2) five months back. These lesions gradually increased in number as well as in size in three months duration extensively involving bilateral upper and lower extremities and back (Figure 1, Figure 2 and Figure 3).

History was not suggestive of any drug intake, sarcoidosis, leprosy, malignancy, diabetes mellitus or obstructive jaundice. However, there was a history of smoking on and off, and no similar illness among family members was identified. Examination revealed height and weight of 174 cms and 85 kgs respectively with obesity. His vitals (e.g. Blood Pressure: 128/84 mm of Hg, Pulse: 82/min, Respiratory Rate: 16/min, Temperature: 98.2°F) were within normal range and body mass index (BMI) was 28 kg/m². Cutaneous examination revealed multiple, discrete to coalescing slightly erythematous papules and nodules of sizes ranging approximately between 0.5 x 0.5 cm² to 1x1cm² They were firm to hard in consistency, non tender, present over extensor aspect of bilateral arms, forearms, thighs, knees and back. Hair, nail, mucosa as well as palms and soles were normal. Sensation was intact and no lymphadenopathy was noted.

Laboratory investigations showed normal lipid levels along with normal general blood investigations. Chest X-ray, ECG and echocardiography was also normal. Biopsy from a nodule on forearm showed normal epidermis with dermal infiltrate of foamy macrophages with lymphocytes. Following the diagnosis, a lipid lowering drug, Atorvastatin 10 mg, was started with an advice for regular follow-up. After initiation of therapy, the lesions started subsiding gradually in two months. However, complete remission could not be observed as the patient did not come for follow up after five months of therapy as suggested.
DISCUSSION
Xanthomas are signs of variety of lipoprotein disorders and not a disease. Clinically it is classified as eruptive, tubo-eruptive or tuberous, tendinous, or planar. Eruptive xanthomata are characterized as multiple, reddish-yellow papules that appear suddenly and are arranged in crops on the extensor surface of extremities and buttocks. Tuberous xanthomata are nodules localized to the extensor surface of the elbows, knees, knuckles and buttocks. Cutaneous finding in our case showed involvement of extensor aspect of limbs but there was sparing of buttocks, axillary and inguinal folds. Eruptive xanthomas are associated with

Figure 1: Xanthomas over left elbow

Figure 2: Multiple xanthomas over bilateral knees

Figure 3: Papules & nodules over back
hypertriglyceridemia and chylomicronemia which may be due to a genetic disorder (primary hyperlipoproteinemia) or an underlying disease process (secondary hyperlipoproteinemia) such as diabetes mellitus, hypothyroidism, nephrotic syndrome, pancreatitis or drug therapy.\cite{4,5} Some previous studies have pointed out that certain comorbidities are associated with xanthoma,\cite{3,5} however, no such comorbidities were found associated in our case.

Eruptive xanthomas are usually associated with hyperlipoproteinemia but local trauma can also elicit xanthomas in normolipemic patients.\cite{6} Although pure or mixed hypertriglyceridemia and a high concentration of VLDL is observed in eruptive xanthomas,\cite{1} normal lipid levels were observed in our case. Although trauma may elicit xanthoma in normolipemic patients,\cite{6} however there was no history of trauma in our case.

To reconfirm the lab reports, lipid profile was repeated outside the institute and it correlated to the earlier finding. Even though the patient had normal lipid profile, lipid lowering drugs (Atorvastatin) was started at a low dose of 10 mg once daily with dietary restrictions of cholesterol and saturated fatty acids. Concerning all the facts, the cause of tubero-eruptive xanthoma could not be explored and believed that it may be idiopathic.

**CONCLUSION**

Tubero-eruptive xanthomas are rare condition and often found to be associated with hyperlipoproteinaemia. Rare cases of idiopathic tuber-eruptive xanthoma among normolipemic patients may be seen in clinical practice and dermatologist should be aware of such condition.

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**REFERENCE**


