Normolipidimic Tuberous Xanthomas

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Case Report

A 25-year-old woman presented to the outpatient department with a history of yellowish nodular lesions on the arm, face, and upper trunk since 8 months. The lesions first appeared as small, slightly elevated plaques that were well circumscribed on the upper eyelids near the inner canthi. After 2 months, papular lesions appeared on the rest of the face, head, back, arms, legs, posterior part of the thighs and axillae. Cutaneous examination revealed multiple, firm, nontender, mobile, red-yellow nodules, 1-2 cm in size on the hands (Fig 1), dorsal aspects of forearms & elbows (Fig 2), knees (Fig 3), extensor surface of legs (Fig 4). Rest of the physical examination was normal. Laboratory investigations including complete hemogram and urinalysis were normal. Lipid profile & hepatic profie within normal limits. X ray chest, ECG, RA factor, ANA levels, CRP, ESR & USG abdomen were normal. Biopsy of a skin lesion of the neck showed localized collection of histiocytes with foamy vacuolated cytoplasm, few lymphocytes and neutrophils in the dermis. Touton giant cells were also noted. Based upon the clinical profile and histopathological changes, diagnosis of tuberous xanthoma was made. Repeat lipid profile after 1 month was unchanged. The patient was kept on follow up. Cryotherapy with nitrous oxide was done for larger tuberous xanthomas along with oral antioxidants. The patient responded well to the treatment. Xanthomas are lesions characterized by accumulation of lipid-laden macrophages. Tuberous xanthomas are firm painless, red-yellow nodules. The lesions can coalesce to form multilobated tumors. Tuberous xanthomas are particularly associated with hypercholesterolemia and increased level of LDL1. They can be associated with familial dysbetalipoproteinemia and familial hypercholesterolemia type (Frederickson IIa and III hyperlipoproteinemias), and they may be present in some of the secondary hyperlipidemias. However, our patient did not show any type of hyperlipidemia. Multiple tuberous xanthomas are characteristically associated with hyperlipidemic states. However, normolipemic xanthomatosis have been reported in the literature, but this entity is uncommon. Normolipemic xanthomatosis has been found to be associated with either a systemic disease or malignancy. Our case showed multiple tuberous xanthomas but without any lipid disorder or associated

systemic disease or malignancy. Normolipemic tuberous xanthomas have been reported previously also, but its occurrence is very rare^{2,3}.



Figure 1: Patient's hands



Figure 2: Patient's elbows



Figure 3- Patient's knees



Figure 4- Patient's legs

References

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