

Eruptive Xanthomas as a Cutaneous Manifestation of Hypertriglyceridemia

**N.S.Neki, Tamil Mani, Himanshu Gupta, Maninder Singh,
 Divyang M Shah, Manish Soni**



Fig-1-4 Showing Eruptive Xanthomas as a Cutaneous Manifestation of Hypertriglyceridemia

A 20 year old female patient presented to the Medicine OPD with chief complaints of itchy, tender, pea sized reddish yellow bumps on the shoulders for about 25 days, which increased in number. Dermatological examination showed papulas and isolated yellowish nodules surrounded by erythematous halos bilaterally on dorsum of the hands(Fig-1), forearms(Fig-2), knees(Fig-3), legs(Fig-4). Laboratory tests showed TLC within normal limits, FBS 210%, S.triglycerides 2400mg%, total cholesterol 772mg% and lipemic serum. Triglyceride values above 400 mg/dl prevented calculating fractions. ECG, X ray chest, hepatic, renal profile & USG abdomen were normal. Excision biopsy was obtained from a yellowish papule. After careful analysis, the diagnosis was made as eruptive xanthomas and HE staining of the upper dermis showed the presence of nodular infiltrate with histiocytes, some of which with foamy cytoplasm. Smaller collections of these histiocytes were arranged around vessels. Staining with Alcian-blue/ PAS showed mucin among histiocytes and disorderly collagen fibers. Weigert staining showed rarefaction of elastic fibers on the areas occupied by the histiocyte infiltrate. The patient was diagnosed as Type 1 Diabetes mellitus and put on insulin therapy. High levels of serum triglycerides or uncontrolled diabetes mellitus generally cause eruptive xanthoma (1,2). Cooper *et al* (3) compared the presence

of the following microscopic aspects in eruptive xanthoma and granuloma annular. 1- one or multiple lesions on the superficial dermis; 2- interstitial and perivascular infiltrate; 3- disorderly reticular dermis; 4- interstitial histiocytes; 5- perivascular histiocytes; 6- perivascular lymphocytes; 7- interstitial lymphocytes; 8- xantomized histiocytes; 9- epithelioid histiocytes; 10- multinucleated cells; 11- lipid deposits; 12- necrobiosis; 13- cellular necrosis; 14- deposit of hyaluronic acid; 15- alteration of elastic fibers. Cutaneous manifestations of systemic diseases can be an early warning sign or a late manifestation of chronic disease. All practitioners should be familiar with common dermatological symptoms of generalized medical conditions so that they may properly recognize such symptoms and order proper diagnostic studies, diagnose and treat the patient, or refer the patient to the proper specialist.

References

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From the Dept. of Medicine, Govt. Medical College and Guru Nanak Dev Hospital, Amritsar, 143001, Punjab, India

Correspondence to : Dr N.S.Neki Professor, Dept. of Medicine, Govt. Medical College and Guru Nanak Dev Hospital, Amritsar, 143001, Punjab, India