

# Palmar Eruptive Xanthomas as Presenting Manifestation of Diabetes Mellitus and Hypothyroidism

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## INTRODUCTION

Xanthomas are interesting manifestations of hyperlipidaemia. Eruptive xanthomas, appearing in crops are a dramatic manifestation of high triglycerides, usually >1000 mg/dL with estimated prevalence of <0.02%.<sup>1</sup>

Eruptive xanthomas are 2–5 mm papules with a yellow centre. They are caused by triglyceride-enriched skin macrophages.<sup>2</sup>

They are seen on exterior aspect of arms, back and buttocks. Xanthomas should be looked out for in all patients with hyperlipidaemia, diabetes, hypothyroidism, and ischaemic heart disease.

## Case

A 31-year-old male presented with complaints of eruptions on his hands and elbows, for a month duration. (Fig. 1 and 2) They were whitish, non-painful, and non-itchy in nature. The patient denied all other symptoms. He had no history of diabetes or thyroid illness. He did not smoke or consume alcohol. Both his parents were diabetic on oral drugs. He had not checked his sugars in last many years. Examination showed 1–2 mm yellowish white papules on his palms, fingers, and elbow. Rest of the physical examination was normal.

Laboratory evaluation showed a total cholesterol of 471 mg/dL with triglycerides of 2020 mg/dL and high-density lipoprotein (HDL) of 35 mg/

dL. His HbA1c was 14.4 with estimated average glucose of 366 mg/dL. His thyroid function showed normal T3 and T4 but thyroid-stimulating hormone (TSH) of 37.96. His liver and kidney function tests were normal. Based on the clinical and laboratory findings, a diagnosis of eruptive xanthomas with hypertriglyceridaemia secondary to diabetes mellitus and hypothyroidism was made.

The patient was initiated on treatment with fenofibrate 160 mg, rosuvastatin 10 mg, and



Fig. 1



*Fig. 2*

metformin 1000 mg with sitagliptin 100 mg daily. A month later, the rashes and markedly reduced with improvement in both the sugar and triglyceride levels in the blood. His total cholesterol was 161 mg/dL, triglyceride 146 mg/dL, fasting sugar 113 mg/dL, postprandial 139 mg/dL, and TSH of 7.06.

## DISCUSSION

Eruptive xanthomas should alert the clinician to high levels of triglycerides, usually >1000 mg/dL. This

should be treated aggressively as it is associated with pancreatitis.<sup>2</sup>

The risk of pancreatitis is 5% and increases to 10–20% at levels above 2000 mg/dL.

Besides high non-HDL cholesterol levels are associated with coronary heart disease. Hence recognising and treating the same is of importance. Fibric acid derivatives are drugs of choice. Statins and other drugs can be added if needed.<sup>3</sup>

Lifestyle changes including regular exercise and low-fat diet also needs to be emphasised. The cause for high triglyceride should also be sought for. Diabetes, hypothyroidism, chronic liver disease, and nephrotic syndrome are common causes of secondary hypertriglyceridaemia.<sup>4</sup>

Our patient has both diabetes and hypothyroidism that manifested as unusual eruptive xanthomas in the hands.

## REFERENCES

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