

# Curious Cutaneous Eruptive Xanthoma

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## Abstract

A 46 year old male presented to urgent care clinic because of recent onset of a rash on his arms and elbows. Patient stated he had been lowering some trees in some unspecified time in the future before presentation and several other leaves had fallen on his arms where the rash was present. The patient described the rash as reddish yellow pustules, reported they were itchy. The patient was diagnosed at that point with dermatitis and prescribed steroid cream. After seven days the patient followed up with a medical aid physician and was complaining of continued lesions on his arms bilaterally with no improvement since using the steroid cream. The patient stated he attempted to expulse material from several of the lesions and was unsuccessful. The lesions looked increasingly yellowish at that point. Patient was diagnosed with an eruptive cutaneous xanthoma and began on a fibrate together with medication compliance education for his diabetes medications and statin. A hemoglobin A1C was tested at the patient's visit and resulted elevated at greater than 14. Punch biopsy was obtained and lipid panel was ordered. Fasting lipid panel resulted in triglycerides of 1901, punch biopsy showed foam cells in step with cutaneous xanthoma. After increased compliance with medications and tight glucose control the patient's lesions regressed and resolved.

**Keywords:** : Diabetes, cutaneous xanthoma ,Primary Healthcare

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## Introduction

Eruptive xanthomas are benign skin lesions caused by localized deposition of lipids within the dermis. The lesions are generally caused by elevated levels of serum triglycerides that leak through the capillaries and are phagocytosed by macrophages within the dermis. Clinical manifestation varies from asymptomatic skin lesions to intense pruritus and tenderness.

We present a case of a adult male admitted with diabetic ketoacidosis secondary to noncompliance with insulin. He was found to own skin lesions as multiple crusted papules on the extremities. Further evaluation revealed elevated serum triglycerides. A diagnosis of eruptive xanthomas was made on skin biopsy, and after starting treatment with lipid lowering agents his cutaneous lesions gradually subsided.

Appearance of eruptive xanthomas can signify the onset of great complications. Prompt recognition of such skin manifestations is warranted to forestall development of fatal medical condition like artery disease and pancreatitis. Education for his diabetes medications and statin. Ahemoglobin A1C was tested at the patient's visit and resulted elevated at greater than 14. Punch biopsy was obtained and lipid panel was ordered. Fasting lipid panel resulted in triglycerides of 1901, punch biopsy showed foam cells in step with cutaneous xanthoma. After increased compliance with medications and tight blood glucose control the patient's lesions regressed and resolved. Eruptive xanthomas are benign skin lesions caused by localized deposition of lipids within the dermis. The lesions are generally caused by elevated levels of serum triglycerides that leak through the capillaries and are phagocytosed by macrophages within the dermis. Clinical manifestation varies from asymptomatic skin lesions to intense pruritus and tenderness. We present a case of a adult male admitted with diabetic ketoacidosis secondary to noncompliance with insulin. He was found to own skin lesions as multiple crusted papules on the extremities. Further evaluation revealed elevated serum triglycerides. A diagnosis of eruptive

xanthomas was made on skin biopsy, and after starting treatment with lipid lowering agents his cutaneous lesions gradually subsided. Xanthomas are benign cutaneous manifestations of extracellular lipid accumulation. Eruptive xanthoma is characterized by the acute, widespread presentation of a papular rash and typically involves the rear, buttocks, and extremities.

Eruptive xanthoma is related to hyperlipidemia, hypertriglyceridemia, and an increased long-term risk of atherosclerotic upset. We present a case of eruptive xanthoma in the course of severe hypertriglyceridemia (10,164 mg/dL) during which the course of the disease was reversed following implementation of lipid-lowering pharmacotherapy. one among the manifestations of hypertriglyceridemia is xanthomas which are defined as skin lesions that develop secondary to extracellular lipid accumulation. Eruptive xanthoma is one in all the uncommon presentations of severe hypertriglyceridemia. it's a sudden eruption of small yellowish skin papules rounded by an erythematous halo. it always appears on the buttocks, thighs, elbows, and lumbar region. It can also appear within three weeks after a major increase in triglyceride level . The lesions may be tender but tend to be asymptomatic. Eruptive xanthomas are herald signs of hypertriglyceridemia, which itself is related to acute pancreatitis . there's a 5-10% risk of acute pancreatitis in patients with serum triglycerides >1000 mg/dL, which risk rises to twenty in patients with blood triglycerides >2000 mg/dL . Other associations with eruptive xanthomas are DM, hepatosteatosis, and lipemia retinalis . Here, we are reporting a rare case of eruptive xanthomas which was secondary to severe hypertriglyceridemia. Table 1: WHO/Fredrickson's classification of hyperlipoproteinemia/hyperlipidemia. Second, be mindful of the association between metabolic syndrome or diabetes with severe hypertriglyceridemia.

There are currently no professional guidelines specific to the medical treatment of cutaneous xanthomas. The treatment of eruptive xanthomas is dependent upon correcting underlying blood lipid imbalances through lifestyle modification and pharmacological therapy. Normalizing lipid profiles generally leads to the progressive resolution of cutaneous xanthomas over the course of months to years. The mechanism by which this happens is unclear, but medical literature does show a few examples of xanthomas resolving following the treatment of high blood lipids [7-11]. Lipid-lowering therapies are also important in reducing the long-term risk for serious cardiovascular disease that is associated with high blood triglycerides [12]. We report a case of eruptive xanthoma with papules which receded following initiation of therapy with fenofibrate, atorvastatin, and insulin. We present evidence that these therapeutic steps can slow and reverse the cutaneous.

This case demonstrates that lipid-lowering pharmacotherapy can reverse the cutaneous course of eruptive xanthoma. The severely elevated triglyceride level accompanying the typical skin lesions made our case unique. It is important for health care providers to know that eruptive xanthomas are usually herald signs of metabolic imbalance that can lead to severe and potentially fatal consequences. Future research should focus on establishing guidelines for the proper pharmacologic treatment

of xanthomas given the growing case literature on the topic. consume alcohol, smoke tobacco or use recreational drugs.

## References

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