Eruptive xanthoma

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Synopsis

Eruptive xanthomas are a consequence of severe chylomicronemia and hypertriglyceridemia. They are accumulations of lipid-laden macrophages that present as pruritic, small, yellow-to-orange papules scattered over the trunk and extremities. Hypertriglyceridemia may result from hereditary conditions such as lipoprotein lipase deficiency or familial hyperlipoproteinemia, or from secondary causes such as excessive alcohol intake or diabetes mellitus. Certain medications (eg, systemic retinoids such as isotretinoin and acitretin, estrogens, protease inhibitors) are also common causes of hypertriglyceridemia and skin lesions. Triglyceridemia in the range of 1500 mg/dL or greater can also lead to pancreatitis.

Treatment is aimed at risk factor modification and lowering the triglycerides through pharmacological and behavioral means. The skin lesions usually resolve within 6 months with appropriate treatment.

Codes

ICD10CM:
E78.2 – Mixed hyperlipidemia

SNOMEDCT:
238952003 – Eruptive xanthoma

Look For

Dome-shaped, yellow-orange, firm papules with definite redness, which can be seen most easily on light skin phototypes. In dark skin phototypes, xanthomas may be tan to dark brown, and the erythema is difficult to detect. Papules are scattered on the trunk, buttocks, and extensor extremities. Often, there are several dozen to hundreds of lesions.

Diagnostic Pearls

Lesions are often in the same stage of development, and onset is rapid.

Differential Diagnosis & Pitfalls

- **Granuloma annulare**
- **Folliculitis**
- ***Pityrosporum* folliculitis**
- **Steroid acne**
- **Sarcoidosis**

- **Leukemia cutis**
- **Exanthematous drug eruption**
- **Langerhans cell histiocytosis**
- **Multicentric reticulohistiocytosis**
- **Lichen amyloidosis**
- **Erythema elevatum diutinum**
- Generalized plane xanthomatosis can occur with **multiple myeloma**, other **monoclonal gammopathies**, and some leukemias.

Best Tests

Fasting serum lipid panel consisting of cholesterol, triglycerides, very low-density lipoprotein (VLDL), low-density lipoprotein (LDL), and high-density lipoprotein (HDL).

Skin biopsy of all varieties of xanthoma will reveal similar histopathologic features.

Histopathology Findings:

- Intradermal proliferation of foamy histiocytes (ie, lipidized macrophages)
- Foamy histiocytes surround blood vessels and percolate between collagen bundles
- Eosinophilic net-like extracellular deposits (ie, free lipid) surrounded by multinucleate giant cells
- Admixed neutrophils, lymphocytes, and nonfoamy histiocytes

Management Pearls

Reduction of the fat content of the diet is critical. Consider consultation with a dietician.

Discontinuation or reduction in dose of any causative medication is essential.

Therapy

If the condition is drug-induced, discontinue the offending medication.

Patients will require dietary modifications and exercise in addition to systemic therapy. Fibrates and niacin work best to lower triglycerides. Avoid bile acid sequestrants, as these drugs may actually worsen hypertriglyceridemia.

Fibrates:

- Clofibrate – 1 g by mouth twice daily
- Fenofibrate – 48-145 mg by mouth daily
- Gemfibrozil – 600 mg by mouth 30 minutes prior to morning and evening meals

Niacin:

- Sustained release niacin – Begin with 500 mg by mouth nightly, which may be increased by 500 mg/day every 8 weeks up to a maximum dose of 2000 mg/day.

Drug Reaction Data

Below is a list of drugs with literature evidence indicating an adverse association with this diagnosis. The list is continually updated through ongoing research and new medication approvals. Click on Citations to sort by number of citations or click on Medication to sort the medications alphabetically.

Medication	Citations
acitretin	1
Antifungal	2
Atypical antipsychotic	1
Estrogen	1
Insulin	1
Isotretinoin	3
miconazole	2

Medication	Citations
olanzapine	1
protease inhibitors	1
Retinoid	3
ritonavir	1