**GILLIAN ROGA, MD**
Department of Dermatology,
St. John's Medical College and Hospital,
Bangalore, India

**MADHUKHARA JITHENDRIYA, DNB**
Associate Professor, Department of Dermatology,
St. John's Medical College and Hospital, Bangalore,
India

# Eruptive xanthoma: Warning sign of systemic disease

A 30-YEAR-OLD MAN presented with multiple asymptomatic skin-colored and yellowish papules and nodules over the elbows, wrists, feet, buttocks, hands, and forearms (**Figure 1**) that had appeared suddenly 2 weeks before.

His medical history included diabetes mellitus, Hansen disease diagnosed 6 years earlier and treated with a multibacillary regimen for 1 year, and pancreatitis diagnosed 6 months earlier.

**Laboratory testing.** When a serum sample was centrifuged at 1,500 rpm for 15 minutes, a large lipid layer formed at the top (**Figure 2**). Other results:

- Triglycerides 5,742 mg/dL (reference range < 160)
- Total cholesterol 293 mg/dL (< 240 mg/dL)
- Fasting blood glucose 473 mg/dL
- Low-density and high-density lipoprotein cholesterol levels normal
- Complete blood cell count within normal limits.

**Other testing.** The electrocardiogram was normal. Retinal examination showed evidence of lipemia retinalis. Histologic study of a biopsy specimen from one of the lesions showed foamy macrophages in the superficial dermis with lymphocytic infiltrate, confirming the diagnosis of eruptive xanthoma.

An urgent medical referral was sought. The patient was started on statins and fibrates, and the treatment resulted in remarkable improvement.

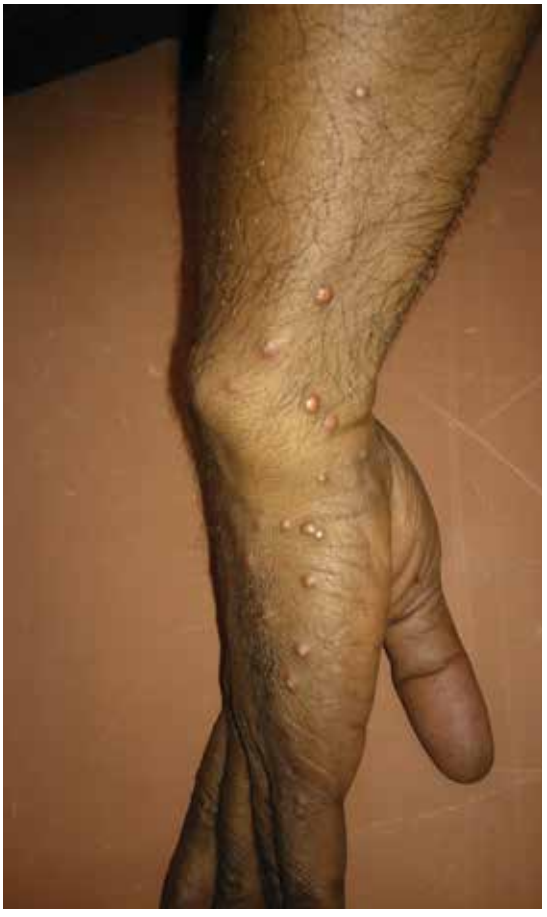

**FIGURE 1.** The asymptomatic dome-shaped papules on the hand and forearm had appeared suddenly 2 weeks earlier.

**Initial laboratory testing showed a triglyceride level of 5,742 mg/dL**

## ERUPTIVE XANTHOMA

Cutaneous manifestations can be warning signs of systemic disease, and physicians should be aware of the dermatologic presentations of common medical conditions.

Eruptive xanthoma is a sign of severe hypertriglyceridemia and is almost always due to an acquired cause such as hyperchylomicronemia or an inherited lipoprotein disorder (eg, lipoprotein lipase deficiency in children,

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FIGURE 2. Centrifuging a serum sample showed evidence of lipemia.

**Eruptive xanthoma is seen in 8.5% of patients with severe hypertriglyceridemia**

common familial hypertriglyceridemia type 5 in adults).[1]

Chylomicronemia syndrome is characterized by triglyceride levels greater than 1,000 mg/dL in a patient with eruptive xanthoma, lipemia retinalis, or abdominal pain or pancreatitis. The syndrome has a prevalence of 1.7 out of 10,000 patients.[2] Treatment is a strict low-fat diet, with a minimal role for fibrates and nicotinic acid.

Eruptive xanthoma is seen at the time of presentation in 8.5% of patients with severe hypertriglyceridemia (serum level > 1,772 mg/dL).[3] In patients with serum triglyceride levels greater than 1,000 mg/dL, the risk of acute pancreatitis is 5%, and at levels above 2,000 mg/dL, the risk is 10% to 20%.[4]

In our patient, the diagnosis of chylomicronemia was based on the appearance of the skin lesions, his history of pancreatitis and diabetes mellitus, and the results of the initial workup, which revealed severe hypertriglyceridemia and lipemia retinalis. The presence of eruptive xanthomas should raise suspicion for a grossly elevated triglyceride level. Therefore, in view of the increased risk of acute pancreatitis and pancreatic necrosis associated with chylomicronemic syndrome,[2] recognizing the cutaneous signs is mandatory. ■

## REFERENCES

1. **Chalès G, Coiffier G, Guggenbuhl P**. Miscellaneous non-inflammatory musculoskeletal conditions. Rare thesaurismosis and xanthomatosis. Best Pract Res Clin Rheumatol 2011; 25:683–701.
2. **Leaf DA**. Chylomicronemia and the chylomicronemia syndrome: a practical approach to management. Am J Med 2008; 121:10–12.
3. **Sandhu S, Al-Sarraf A, Taraboanta C, Frohlich J, Francis GA**. Incidence of pancreatitis, secondary causes, and treatment of patients referred to a specialty lipid clinic with severe hypertriglyceridemia: a retrospective cohort study. Lipids Health Dis 2011; 10:157.
4. **Scherer J, Singh VP, Pitchumoni CS, Yadav D**. Issues in hypertriglyceridemic pancreatitis: an update. J Clin Gastroenterol 2014; 48:195–203.

***ADDRESS**: Gillian Roga, MBBS, Department of Dermatology, St. John's Medical College, Sarjapura Road, Bangalore 560034, Karnataka, India; gillyroga@gmail.com*