

Urticaria Due to Cow's Milk Allergy in an Exclusively Breast-fed Newborn

The Editor,

Sir,

Although cow's milk protein is one of the most common food allergens in infancy, there are few reports about cow's milk allergy (CMA) in neonates (1). The symptoms due to CMA can occur from birth, even in exclusively breast-fed newborns (2), as in this index case. While gastrointestinal symptoms are seen commonly, cutaneous signs are extremely rare in the neonatal period (3). Here, we report a breast-fed newborn who developed urticaria due to CMA, which is rarely seen in the neonatal period.

In 2014, a 24-day-old female infant was admitted to the neonatal unit of the Tepecik Training and Research Hospital, Turkey, with a general urticarial rash of two days' duration. There was no family history of atopia. The baby had been exclusively breast-fed since birth. On physical examination, a generalized urticarial rash was noted over the trunk, face and limbs. Erythematous plaques occurred with central swelling and central pallor which typically disappeared without residual lesion (Figs. 1 and 2).



Fig. 1: Urticarial rash on the face of the patient.

Serum immunoglobulin E (IgE) level was elevated (204 IU/ml; normal range: 0–165 IU/ml), whereas specific IgE level was normal. An extensively hydrolyzed formula was commenced, and a single dose of methylprednisolone (1 mg/kg) was administered intravenously. All lesions disappeared on the following day. Steroid therapy was stopped, and the mother was encouraged to continue breast-feeding and to avoid all milk and milk products from her diet. The infant was discharged after three days without symptoms.

Symptoms and signs associated with CMA may involve multiple organ systems: generally, the skin and the gastrointestinal and respiratory tracts (4). The diagnosis of CMA is based on a detailed history of symptoms, skin prick test, serum specific IgE to cow's milk protein, elimination diet and oral food challenge (5). As the baby had been only breast-fed and the mother had taken dairy products, we thought that the urticarial lesions could be due to CMA. In our patient, the total serum IgE level was elevated, but the test was negative for specific IgE. Milk-specific IgE is usually not established in newborns with CMA. Therefore, an oral food challenge test should be the main diagnostic method for CMA (3). If the infant has been fed with formula milk, the formula should be changed to an extensively hydrolyzed formula or amino acid formula (4).

Treatment of urticaria consists of two main steps: (a) the avoidance of urticaria triggers or underlying causes; and (b) pharmacological treatment such as H1 antihistamines (6, 7). Corticosteroids should be used



Fig. 2: Urticarial rash on the legs of the patient.

only in the management of severe systemic symptoms, but there is no evidence for use in newborns (6, 8).

Urticaria is a rare disease in the neonatal period. When urticaria is diagnosed in a newborn, CMA should be considered, and investigations should be performed.

Keywords: Cow's milk allergy, newborn, urticaria

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