

Abstract

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Zinc-deficiency dermatitis in breast-fed infants.

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BACKGROUND: We report ten infants (mean gestational age: 30 weeks; range: 25 to 40 weeks) with zinc deficiency dermatitis who developed erosive, impetiginized periorificial dermatitis at 10 weeks of age (corresponding to a mean gestational age of 41.4 weeks, with a range of 36-44 weeks), but who were otherwise well. Cutaneous symptoms were initially misdiagnosed as eczema or impetigo in 8/10 (80%) children who received either topical (4/8) and/or systemic (6/8) antibiotics.

METHODS AND RESULTS: Topical corticosteroids were applied in 4/10 infants for a mean time of 4 weeks (range: 2 to 5 weeks) before the correct diagnosis was established by decreased serum zinc levels; skin atrophy (telangiectasia, thinning) as a complication of topical steroid treatment (class II steroids) was observed in two infants. All children responded to oral therapy with zinc sulfate or zinc gluconate (1.5-4 mg/kg/d). Skin lesions started to clear within 24 h after the initiation of therapy and had completely cleared in all infants after 14 days of therapy (range: 3-14 days).

CONCLUSIONS: We conclude that nutritional zinc deficiency is a frequently misdiagnosed problem in thriving, fully breast-fed preterm babies. It is attributable to the decreased zinc content of human milk as compared to cow's milk, and the increased demand of zinc in rapidly thriving preterm infants. It seems advisable to routinely check serum zinc levels in fully breast-fed preterm infants who do not receive regular oral zinc supplementation once they reach a gestational age of 40 weeks.

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