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CLINICAL IMAGE

Madarosis in acute Kawasaki disease—an uncustomary accompaniment

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Madarosis (i.e., loss of eyebrows or eyelashes) is an innocuous manifestation of a variety of systemic illnesses (for example, endocrinopathies, infections, genetic disorders) including autoimmune diseases like lupus and localized scleroderma [1]. Alopecia in acute KD, which is a rare manifestation and mostly limited to loss of scalp hair, may reflect the underlying autoimmune/inflammatory mechanisms involved in the disease pathogenesis [2–4]. However, reports of madarosis in KD are lacking. Herein, we report a novel finding of madarosis in acute KD.

A 7-year-old girl presented with fever for 2 weeks. On examination, she had madarosis (Fig. 1), bilateral conjunctival injection, and right cervical lymphadenopathy. There was no history of contact with a suspected or proven case of SARS-CoV-2 infection. Laboratory investigations showed elevated inflammatory parameters: total white-cell count 15.2×10^9/L (differential: neutrophils 69%, lymphocytes 24%, monocytes 04%, eosinophils 03%), platelet count 640×10^9/L [normal $< 400 \times 10^9$], erythrocyte sedimentation rate 70 mm/1st hour [normal < 20], and C-reactive protein 52.93 mg/L [normal < 6]. Serum alanine aminotransferase levels were mildly elevated (50 U/L [normal < 40]) and mild decrease in blood hemoglobin (105 g/L [normal 110–150]) was noted. Both RT-PCR and serology for SARS-CoV-2 were negative. A diagnosis of incomplete KD was proffered as per the American Heart Association [2017] criteria and she was treated with intravenous immunoglobulin (IVIg, 2 gm/kg) and aspirin (4 mg/kg/day) [5]. Fever improved within 24 h of IVIg therapy. She developed periungual peeling on day 17 of her illness. Two-dimensional echocardiography remained normal throughout the disease course.

Ours is, probably, the first report of madarosis in acute KD. However, more data would be required to establish causality. Similar to alopecia in KD, autoimmunity is likely to play an important role in its evolution [3, 4]. In our case, no specific therapy for madarosis was required and improvement was noted on follow-up after IVIg therapy alone (Fig. 1). Although madarosis in KD may be disfiguring and be a source of parental concern, complete recovery in a few weeks seems to be the expected outcome.

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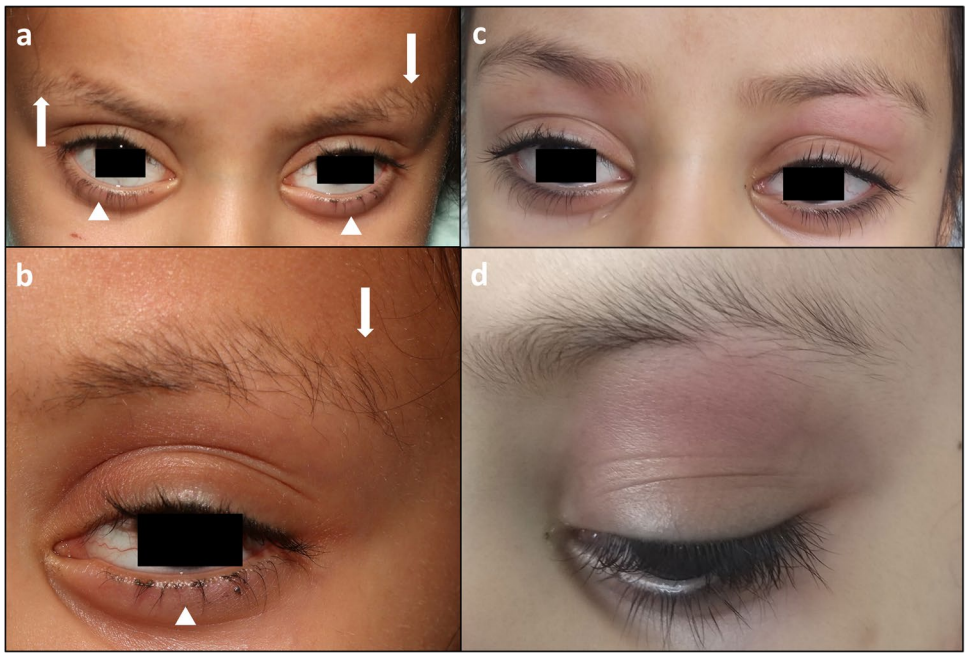

Fig. 1 Madarosis in acute Kawasaki disease. **a** loss of hair of both eyebrows (white arrows) and eyelashes (white arrowheads) noted at presentation; **b** closer view depicting the loss of hair of left eyebrow (white arrow) and left lower eyelash (white arrowhead); **c:** improvement in madarosis noted at 6 weeks of follow-up; **d** closer view depicting regrowth of hair of left eyebrow and eyelash (at 6 weeks)

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Declarations

Ethical approval and informed consent As this manuscript pertains only to a case report specific ethics approval is not mandated. Informed consent was taken from the parents of the index child before inclusion into the manuscript.

Disclosure None.

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