

Complete Kawasaki disease (KD) with peculiar skin manifestations

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DESCRIPTION

An 18-month-old female infant came to our medical attention because of persisting fever for 5 days. The child presented a diffuse and polymorphous skin rash having an angioedema-like aspect at the proximal parts of the limbs (**figure 1**). No drugs were taken before the admission.

The child was quite suffering, and the physical examination revealed some other remarkable signs: (1) non-purulent conjunctive injection; (2) cheilitis characterised with an intense lips redness, but no cracking (**figure 2**); (3) fingers and hands oedema, without palmar skin rash (**figure 3**). All these mucosal and cutaneous manifestations in addition to fever lasting longer than 5 days were consistent with the diagnosis of a complete form of Kawasaki disease (KD).¹ Moreover, C-reactive protein and erythrocyte sedimentation rate were increased, as well as α 2-globulin fraction of serum proteins.

As a consequence, the patient started the treatment with intravenous immunoglobulin at the standard dose of 2g/kg in 12–18 hours, and she achieved a

complete and stable clinical response in 24–36 hours. High-dose aspirin (80 mg/kg) was used for 2–3 days, until the complete resolution of fever; thereafter,



Figure 1 Non-specific polymorphous skin rash with urticarial and angioedema-like aspects.



Figure 2 Cheilitis.



Figure 3 Fingers and hand oedema.



Figure 4 Skin desquamation after the amelioration of the rash.



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Learning points

- ▶ KD rash can be quite variable: in addition to classic polymorphous exanthema, it can have multiple aspects, including urticarial and/or angioedema-like aspects.
- ▶ The careful evaluation of the association to other typical—but non-specific—cutaneous and/or mucosal signs can lead to the diagnosis of KD.

low-dose aspirin (5 mg/kg) was started, as platelet count was increasing. No abnormalities of coronary arteries were detected through echocardiogram. On the sixth day following fever remission, the skin rash was markedly improved and started showing the typical desquamation at the trunk (figure 4).

The skin involvement during KD can be variable in type and extension. Initially, in this case, the skin rash showed some urticarial and angioedema aspects, which could have misled the diagnosis of KD. Indeed, the exanthema during KD is not specific and quite heterogeneous, and it can occur during several

viral illnesses causing high-persistent fever (such as EBV, CMV and adenovirus, for instance) and important systemic inflammatory diseases.^{2,3} However, the association to other typical—but non-specific—mucosal and skin manifestations of KD has correctly driven the diagnosis.

Competing interests None declared.

Patient consent Guardian consent obtained.

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REFERENCES

- 1 Dietz SM, van Stijn D, Burgner D, *et al.* Dissecting Kawasaki disease: a state-of-the-art review. *Eur J Pediatr* 2017;176:995–1009.
- 2 Poddighe D, De Amici M, Marseglia GL. Spontaneous (autoimmune) chronic urticaria in children: current evidences, diagnostic pitfalls and therapeutic management. *Recent Pat Inflamm Allergy Drug Discov* 2016;10(1):34–39.
- 3 Poddighe D, Cavagna L, Brazzelli V, *et al.* A hyper-ferritinemia syndrome evolving in recurrent macrophage activation syndrome, as an onset of amyopathic juvenile dermatomyositis: a challenging clinical case in light of the current diagnostic criteria. *Autoimmun Rev* 2014;13(11):1142–1148.

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