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Car Seat Dermatitis - A Case Report

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Case Presentation:

Patient: JD

History of Present Illness: 9 month old male presents with red and itchy rash located on the legs, face, neck, and back since early June of 2012. The eruption initially improved slightly with hydrocortisone and TMC 0.1% ointment and bleach baths twice weekly, but progressed to involve larger areas and purulent drainage was noted. Denies new detergents, lotions and pets. No personal/ family hx of psoriasis or eczema. Pt was seen as an in-patient consult on 6/5/12.

Medical History/Surgical History: None

Family History: Allergies, Asthma

Social History: Lives at home with parents

Current Medications: TMC 0.1% cream BID x 2-3 weeks to body, HC 2.5% ointment to face, Benadryl PRN HS

Past Medications: Prednisolone soln. 1/2 tsp QD x 10 days, cephalexin suspension. 1/2 tsp BID x 7 days, mupirocin TID lesions on the legs PRN

Allergies: NKDA

Physical Examination: Red, weeping, crusted plaques symmetrically distributed over posterior legs. Scattered pink papules and plaques on the chest, back, trunk, scalp, lateral face and lower extremities. Few light pink macules on suprapubic area and medial thighs. Genitalia are clear.

Biopsy: None

Labs and Studies: (6/4/12) CBC, CMP, CRP – WNL; (6/21/12) Aerobic bacterial cx – mixed skin flora including multiple gram-negative rods

Reason for Presentation: Interest



ABSTRACT: There are very few reports of car seat dermatitis in the literature; however, an increasing trend of dermatitis involving areas of skin in contact with certain infant car seats materials has been seen in recent years. Although, it shares many of the characteristics of atopic dermatitis and may coexist with it, there are several key features that help to define this condition. It is important for the clinician to recognize the patterns and behavior of this entity for early diagnosis and prompt treatment.

INTRODUCTION: Car seat dermatitis displays variable lesion morphology. In acute cases inflamed papules and vesicles are seen whereas in chronic cases a refractory, lichenified eczematous pattern predominates. Secondary infection is common and idiosyncratic id reactions also occur. The key distribution pattern is symmetrical and bilateral corresponding to areas that have come into direct contact with the car seat fabric, commonly affecting the elbows, upper posterior thighs, lower lateral legs and occipital scalp in a band-like pattern. It is most commonly seen in the summer months when infants typically wear less clothing and sweat more often. Similar to many forms of contact dermatitis, sweat worsens the dermatitis and can potentiate the release of irritants or allergens. In contrast, atopic dermatitis is classically seen on the extensor sites in infants. It presents after two months of age with erythema and scaling of the cheeks, scalp, neck, forehead, and wrists. The areas involved correspond to the infant's ability to scratch or rub the site as well as sites that are affected with crawling. It is typically worse in the winter months and improves in the summer.

Our case displays the coexistence of atopic dermatitis and car seat dermatitis. This distinction can be quite difficult. The key distribution sites as well as symmetry help to distinguish the two entities. Additionally, parents of infants with a history of atopic dermatitis note the regions exposed to the car seat are worse and fail to respond to topically applied mid-potency corticosteroids as seen in our patient. The differential diagnosis includes: atopic dermatitis, seborrheic dermatitis, irritant or allergic contact dermatitis, nummular dermatitis, scabies, psoriasis, and various immunodeficiency syndromes.

Treatment includes barrier protection from the car seat with a blanket or cloth cover or changing the car seat to another cloth or fabric material. Incidentally, rapid improvement was seen in our case when the car seat was covered with a cloth by the patient's grandmother. Continued application of a mid-potency topical corticosteroid is also recommended and baseline atopic dermatitis may continue to flare and need further treatment. Zug, et al that patch testing should be considered for children with persistent atopic dermatitis that is worsening, difficult to control, or has a distribution suggesting allergic contact dermatitis, recommends it in a study.

Infant car seat pads that contain a shiny, nylon-like material have been proposed as the potential culprit. Due to the proprietary nature of the components used in the manufacturing process of the car seat, it is difficult to obtain a list of potential irritants or allergens. Suspected agents include the flame retardant contained in the nylon material.

In summary, it is important for the clinician to recognize that car seat pads may play a role in resistant cases of contact dermatitis that is symmetrical and bilateral and can occur primarily, or in the setting of atopic dermatitis. Key features include location and pattern of the skin lesions and failed response despite appropriate treatment.

References:

- 1 Ghali FE. "Car Seat Dermatitis": A Newly Described Form of Contact Dermatitis. *Pediatric Dermatology* 2011;28(3):321-326.
- 2 Hammonds LM, Hall VC, Yiannis JA. Allergic contact dermatitis in 136 children patch tested between 2000 and 2006. *Int J Dermatol* 2009;48:271-274.
- 3 Pigatto P, Martelli A, Marsili C et al. Contact dermatitis in children. *Ital J Pediatr* 2010;36:2-8.
- 4 Zug KA, McGinley-Smith D, Washaw EM et al. Contact allergy in children referred for patch testing: North American Contact Dermatitis Group data, 2001-2004. *Arch Dermatol* 2008;144:1329-1336.