Allergic contact dermatitis (ACD) reactions to nickel have pleomorphic presentations owing to the ubiquity of this allergen in the environment. In children, ACD to nickel classically occurs on the earlobes, neck, wrists, and infraumbilical area. We describe a newly recognized presentation for this common childhood ACD—on the posterior thighs—which we have termed the school chair sign.

Although allergic contact dermatitis (ACD) was once believed to be uncommon in infants and children, some authorities estimate that 5% to 10% of all cases occur in pediatric patients. Sensitization to contact allergens can be induced in term and preterm infants, and case reports have documented ACD in 1-week-old infants. The incidence of pediatric ACD is increasing. Excluding plants, nickel is the most common allergen in children and in women in Europe and the United States. Ear piercing in children of young ages is a significant risk factor for nickel ACD and is thought to account for its increased incidence in girls and women.

Careful physical examination and review of the patient’s history often yield clues to the diagnosis of ACD. Precipitating factors linked to work or hobbies and the distribution of the dermatitis are important evidence. Nickel ACD in children classically occurs on the earlobes, neck, wrists, and infraumbilical area. We describe a new site of involvement—the posterior thighs of children—which is most often affected during the spring and fall months.

Case Reports

Patient 1—A 9-year-old girl was seen for a pruritic eruption on her posterior thighs (Figure 1). For 2 to 3 years, she had noticed that the rash cleared during the summer but returned during the school year. Her ears had been pierced on 3 separate occasions, and the piercing was complicated by recurrent “infections.” The eruption on the thighs was
Children with the school chair sign can prompt an accurate diagnosis of nickel ACD, rather than a misdiagnosis of atopic or irritant dermatitis. An easy initial therapeutic approach for children with the school chair sign is to avoid obvious nickel contact by using a chair pad or a grommet-free chair. Clinicians who treat children with chronic and recurrent dermatitis should not overlook the possibility of ACD. Nickel allergy is a very common childhood problem, and heightened awareness of the sites of predilection in school-aged children, such as the posterior thighs, can help control the symptoms.

REFERENCES