

BRIEF REPORT

Pediatric Dermatology 1–2, 2017

Garlic Dermatitis on the Neck of an Infant Treated for Nasal Congestion

Abstract: The health benefits of garlic (*Allium sativum*) as a naturopathic remedy have been well documented, but topical application of garlic has been linked to allergic and irritant contact dermatitis. We present a case of severe irritant contact dermatitis due to application of a fresh garlic necklace to the neck of infant for treatment of nasal congestion.

Garlic (*Allium sativum*) has been used as a natural remedy for treatment of various ailments, including pain and infections, since the time of ancient civilizations (1). Although the health benefits of garlic are well documented, there have also been a number of reports since the 1980s that have described adverse effects related to topical use of garlic, including allergic and irritant contact dermatitis, some so severe as to be designated chemical burns (2). We present the case of a burn to the neck of an 8-month-old infant secondary to topical use of fresh, peeled garlic for relief of nasal congestion.

CASE REPORT

An 8-month-old South Asian girl presented to our clinic with a 3-day history of multiple marks on the

lateral and anterior neck. According to her mother, the infant had developed symptoms of nasal congestion over the previous 2 weeks. Given the persistence of symptoms and based on a suggestion from the paternal grandmother, a necklace made from raw, peeled garlic had been placed around the child's neck overnight. In the morning, the mother had noted red skin lesions where the garlic necklace had been. This was the infant's first exposure to topical garlic. Her past medical history was unremarkable, with no current medications or allergies. On physical examination, she was a well-developed, interactive infant in no acute distress. Overlying the lateral and anterior neck were multiple well-demarcated linear red-brown plaques, one with overlying erosion (Fig. 1). The remainder of the skin examination was unremarkable. The child was diagnosed with irritant contact dermatitis secondary to raw garlic. The mother was reassured, counseled on the future use of garlic and other natural remedies, and advised to treat the affected areas with liberal use of petrolatum-based emollients.

DISCUSSION

Documented cases of garlic used as a natural remedy date to ancient Egypt, where it was used as an anti-infective. Since then, its use as an analgesic, anti-infective, antiinflammatory, or even a weapon against evil spirits has been documented in many cultures (1). Although most benefits of garlic have been linked to its systemic use, there has been evidence since the 1980s of adverse cutaneous reactions to fresh garlic induced both accidentally and intentionally (3,4).

The majority of the documented cutaneous adverse reactions are due to allergic contact dermatitis (type



Figure 1. Multiple well-demarcated linear red-brown plaques overlying the lateral and anterior neck.

DOI: 10.1111/pde.13147

IV allergic reaction), most commonly from sensitization to diallyl disulfide, allicin (oxidized derivative of disulfide) and allyl propyl disulfide (2). Reports of irritant dermatitis, at times described in the literature as “chemical burns,” are rarer and can occur in individuals with no prior exposure to garlic (2). A case similar to ours was reported in a 24-year-old woman who used topical garlic on the anterior neck for treatment of a sore throat (5), but there are only a few reports of adverse cutaneous reactions in children and infants. Theoretically, this population is at high risk given young children’s thin, permeable skin (3). With the increasing prevalence of the use of naturopathic medicine in the West, it is important for physicians to be aware of these practices and potential adverse reactions.

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