

Carta al Editor/Letter to the Editor**Radiator-induced erythema ab igne in 8-year-old girl**

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ABSTRACT

The cutaneous lesion of erythema ab igne are characterized by a reticulate erythema, hyperpigmentation, fine scaling, epidermal atrophy and telangiectasias, and reticulated erythema. We report a case of erythema ab igne on the hands of a 8-year-old girl, induced by classic homemade radiator.

Key words: erythema; reticulate pigmentation; child.

Introduction

The cutaneous lesion of erythema ab igne (EAI) is characterized by a reticulate erythema, hyperpigmentation, fine scaling, epidermal atrophy and telangiectasias present in areas of chronic mild to moderate exposure to thermal radiation, insufficient to cause burn. The conditions is also termed "ephelis ignea", erythema a calore, "ephelis ab igne", or "erythema a computatro". It is usually asymptomatic, but sometimes people can refer to it as heat sensation or/and pruritus^{1,2}.

Erythema ab igne (EAI) has been described on the shins of individuals working in front of coal stoves or sitting close to a fireplace or other heating sources. Lately, several cases of laptop-induced EAI have been reported³.

We report a case with erythema ab igne on the thigh of a 8-year-old girl, induced by classic homemade radiator.

Case Report

An 8-year-old girl with no past medical history presented with symptoms of burning experienced on the back of hands (figure 1). Physical examination revealed reticulated, reddish-brown macules with ill-defined border on the back of hands.

Family members admitted that for eight months, during October 2012-April 2013, the girl heated her hands by putting them over the radiator, for 15-45 minutes several times a day.

Dermoscopy showed the presence of homogenous, brownish pigmentation with erythema at the edges of the macules. The other tests carried out, including full blood count, C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), ANA screening were all within the normal range. The diagnosis was erythema ab igne causae radiator.

Discussion

Erythema ab igne has been reported following the use of various heat sources, including hot pads and electric blankets, laptops, open fires, hot stoves, chulha, space heaters, infrared lamps, steam radiators, car heaters, wood-burning stoves, furniture with inbuilt heating unit, heating blankets, frequent bathing in hot water, and sauna belts^{4,5}.

EIA ("redness from fire") is seen rarely in young patients. We have described a rare case of EAI in child below 10 years of age- so far not reported. An extensive PubMed search did not reveal any report of erythema ab igne in a children below 10 years of age, although cases 12-year-old children (induced by a laptop) have been reported in the literature^{6,7}.

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Figure 1. Erythema ab igne on hands (backs of the hands and part of the wrists).

The continuous exposure to infrared radiation initially causes transient erythema, progressing to reticulate pigmentation and keratosis. The lesion of EAI is acquired by repeated and prolonged exposure to infrared radiation at temperatures up to 3-47°C¹.

Because EAI is a precancerosis, it has been associated with several different types of cutaneous neoplasms including the Merkel cell carcinoma, squamous cell carcinoma, and cutaneous marginal zone lymphoma².

Cirrhosis, malnutrition, hypothyroidism, internal malignancy, Hansen disease, and anemia are some of the medical conditions that have been associated with EAI.

The lesion characteristic of EAI associated to a history of excessive exposure to heat in the area of onset facilitates clinical diagnosis of this disease. The duration of the repeated exposure is necessary to provoke alterations in the skin, which varies from months to several years and the damage appears to be cumulative.

No effective treatment is available. The

various treatment modalities suggested for erythema ab igne include topical retinoids, with or without topical steroids and 5-fluorouracil cream³.

Progression of the disease can only be halted by the avoidance of further heat exposure.

Conclusion

In this case, the cause/effect correlation could be easily established. The diagnosis, therefore, was essentially clinical. This is the first case of EAI in a child so young.

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