

Case Reports

Iatrogenic erythema ab igne in a patient with diabetic neuropathy**Alka Sharma, MD¹, Vishal Sharma, MD²**

Department of Medicine, Government Medical College and Hospital, Sector 32, Chandigarh, India¹; Department of Gastroenterology, Postgraduate Institute of Medical Education and Research, Chandigarh, India²

Corresponding Author: Alka Sharma, Department of Medicine, Government Medical College and Hospital, Sector 32, Chandigarh, India. E-mail: alka118@gmail.com

Abstract

Erythema ab igne is a cutaneous manifestation of exposure to heat. It can also occasionally be associated with malignancy. We report a case of a 65 years old lady with diabetic nephropathy who developed erythema ab igne secondary to hot fomentation. The lesions improved with avoidance of heat exposure.

Keywords: erythema ab igne; heat; skin; diabetes mellitus; neuropathy

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Introduction

Erythema ab igne is a cutaneous manifestation of exposure to heat. It can be a result of occupational or environmental exposure to heat. Occasionally it can be due to iatrogenic exposure to heat [1]. We present one such case wherein a patient of diabetic nephropathy presented with erythema ab igne resulting from hot fomentation for neuropathic pain.

Case presentation

A 65 years old lady presented to us with complaints of abnormal discoloration of the calf area (Figure 1). The lesions were not associated with any color change and pain or pruritus. She was a known case of diabetes mellitus for 10 years and was on oral hypoglycemic agents (Metformin extended release 2 g each day and Glimipride 2 mg each day). For around a year and a half

she had been having burning pain in both his lower limbs. Examination revealed loss of vibration sense and absent ankle jerks bilaterally. She had been prescribed Gabapentin. However her pain remained uncontrolled and she started hot fomentation for relief of pain as advised by a practitioner of alternative medicine. She came to us for the development of skin lesions. Her hemogram and peripheral smear were normal. Her liver function tests and kidney function tests were normal. Ultrasonography of abdomen was unremarkable except for presence of fatty liver. 24 hour urine revealed a proteinuria of 700 mg. A diagnosis of diabetic neuropathy and nephropathy was made. The skin lesion were diagnosed to be due to erythema ab igne was made. The patient was reassured and explained the lesions were due to heat fomentation and to stop the same. Over two months her lesions disappeared.



Figure 1. Erythema ab igne at the calf

Discussion

Erythema ab igne is characterised by reticulated pigmentation which results from thermal injury to skin[2]. It has also been described as a manifestation of malignancy [3]. The lesions may have a variable color: initially erythematous and later purple or brown. The exposure to around 43-47°C is usually required for a variable duration.

The present case is of interest as there was underlying diabetic neuropathy and hot fomentation was used for relief of the same. Another report has previously reported similar skin lesions although the site of lesion in that

report was different (back) [4]. It is therefore possible that patients with neuropathy may use heat exposure for relief of pain and may be exposed to heat excessively because of sensory dysfunction. It is important to recognize the lesion not just because it indicates abnormal heat exposure but also the possible risk of complications like development of squamous cell carcinoma. Although the lesions usually resolve with stopping exposure from heat, refractory lesions can be managed with Nd-YAG laser and topical 5-flourouracil[5].

References

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