

Pyemotes dermatitis: Comet sign

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Reactions to arthropod bites are common in summer, however their diagnosis can be occasionally challenging. *Pyemotes* dermatitis is not very common and is characterized by a suggestive clinical aspect called « comet sign ». Herein, we describe a case occurring in a female patient.

In August 2021, a 45-year-old woman, consulted for a pruritic rash that appeared three days earlier. There was no evidence of return from a trip, and the patient did not recall a bite. The examination revealed a papulonodular lesion with a central haemorrhagic punctum on the left shoulder, resting on an erythematous maculopapular background associated with a linear trail extending towards the sternal region, measuring several centimeters (Fig. 1). This aspect, called “comet sign”, was suggestive of a *pyemotes ventricosus* dermatitis. The eruption resolved in a few days after a treatment with topical steroids.

Pyemotes ventricosus, is a mite that parasitizes the larvae or nymphs of a large number of insects, commonly named « straw itch mite » or « grain itch mite » [1]. It usually occurs during summer, from May to September, with a peak in July and August, because the optimal temperature for its development is around 26°C [2]. The rash appears with a delay of 10 to 48 hours after the bite, and often involves covered areas [3]. The bite is usually painless [1].

Typically, the rash presents as pruritic, erythematous maculopapular lesions, sometimes centered by a vesicle, followed by the occurrence of a linear erythematous streak called “comet sign” [1–3]. This sign, described by Del Giudice et al in 2006 [2], is highly suggestive of the diagnosis. This linear streak could correspond to a limited lymphangitis or could

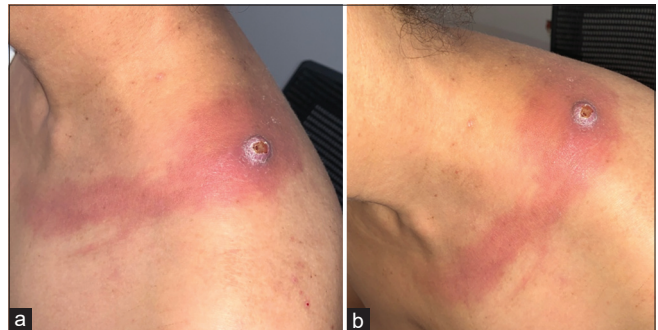


Figure 1: (a and b) Papulonodular lesion with a central haemorrhagic punctum, associated with a linear trail (comet sign).

be caused by an immune response induced by the sting [1]. The treatment is symptomatic based on use of topical steroids, along with environmental measures to avoid reinfestation [3].

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki. An informed consent was obtained from the patient.

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