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Images in Infectious Diseases

Occurrence of erythemato-purpuric patches upon contact with a myriapod (diplopod)

Sergio de Almeida Basano^{[1],[2]}, Cipriano Ferreira da Silva Junior^{[1],[3]} and Dionatas Ulises de Oliveira Menequetti^{[4],[5],[6]}

[1]. Centro de Pesquisa em Medicina Tropical de Rondônia, Porto Velho, RO, Brasil.

[2]. Secretaria de Saúde do Estado de Rondônia, Porto Velho, RO, Brasil.

[3]. Universidade Federal de Rondônia, Porto Velho, RO, Brasil.

[4]. Universidade Federal do Acre,

Programa de Pós-Graduação *Stricto Sensu* em Ciências da Saúde na Amazônia Ocidental, Rio Branco, AC, Brasil.

[5]. Universidade Federal do Acre,

Programa de Pós-Graduação *Stricto Sensu* em Ciência, Inovação e Tecnologia para Amazônia, Rio Branco, AC, Brasil.

[6]. Universidade Federal do Acre, Colégio de Aplicação, Rio Branco, AC, Brasil.



FIGURE 1: Lesion caused by a myriapod (diplopod). **(A)** Myriapod (diplopod) that caused the lesion; **(B)** Erythemato-purpuric stained lesion; **(C)** Desquamation with achromia atop the damage; **(D)** Reactive erythema; and **(E)** Perifollicular hyperchromia.

A 40-year-old woman presented erythematous patches that evolved with hyperchromia on her left forearm after contact with a myriapod (Figure 1). She complained of a local burning sensation for the past 48 hours, and two mirrored erythemato-purpuric patches of linear configuration were present in the left antecubital fold. We noticed the occurrence of marked epidermal necrosis

Corresponding author: Dr. Sergio de Almeida Basano.

e-mail: basanosergio22@gmail.com
https://orcid.org/0000-0001-8720-330X

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obscuring exogenous pigmentation, which is cited as the primary pathogenic mechanism. When pressed or crushed, diplopods tend to release chemical substances, such as quinones and hydrogen cyanide, that induce an erythemato-purpuric inflammatory process followed by prolonged residual hypo- and/or hyperpigmentation. Hypopigmentation results from temporary intervention of the functional activity of the epidermo-melanic unit presenting increased melanin production at the epidermis basal layer, while confetti hyperpigmentation results from follicular melanin activity. The follicular unit constitutes adnexal reserve during regenerative processes in the skin generating hyperchromic spots of follicular size and density. These macules are usually serpiginous or rounded



based on the diplopod's anatomical configuration. The tissue damage is proportional to the toxin's nature and volume and exposure time². During rapid exposure, only exogenous pigmentation may appear. However, extreme cases carry the risk of blister formation, ulceration, and epidermal necrosis². In this case, the inflammatory response induced epidermal necrosis, which was assessed using erythemato-purpuric staining, followed by desquamation with achromia on the topography of the damage, reactionary erythema, and perifollicular hyperchromia (**Figure 1**). Such spots usually disappear after a few weeks or months without scarring³.

ETHICAL COMMENTS

The patient signed an informed consent form. Since this is a case report, ethics committee approval was not required.

AUTHORS' CONTRIBUTION

SAB and CFSJ: Participated in the medical care and writing of the scientific article; DUOM: Participated in the identification of the Myriapod and the writing of the scientific article.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

ORCID

Sergio de Almeida Basano: 0000-0001-8720-330X

Cipriano Ferreira da Silva Junior: 0000-0002-4058-9046

Dionatas Ulises de Oliveira Meneguetti: 0000-0002-1417-7275

REFERENCES

- Haddad Júnior V, Manço DG. An unusual dark macular lesion in the plantar region of a child. Rev Soc Bras Med Trop. 2019;52:e20190011.
- 2. Radford AJ. Millipede burns in man. Trop Geogr Med. 1975; 27(3):279-87.
- 3. Fracaroli TS, Miranda LQ, Maceira JP, Barcaui CB. Exogenous pigmentation after Diplopoda exposure leading to a dermatoscopic parallel ridge pattern on the plantar region. J Dermatol Case Rep. 2015;9(3):85–6.