

Images in Infectious Diseases

The train tracks sign is a valuable skin marker of envenomations caused by caterpillars

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A 64-year-old Caucasian woman sought a dermatological consultation 4 days after returning from a holiday in a rural area of the Southeast region of Brazil. She reported an acute painful sensation on her exposed chest after feeling something fall on her from an orange tree. Within a few minutes, the area became red, swollen, and severely painful. On examination, she had sequential petechial purpuric lesions, in a linear and parallel distribution pattern (**Figure A**). Dermoscopy of the lesion (DermaLite DL100TM; 3Gen Inc., San Juan Capistrano, CA), demonstrated purpuric macules with overlying necrotic scales.

The skin appearance and the sudden pain after contact with a tree are strongly suggestive of caterpillar envenomation (erucism)¹. Caterpillars of the Saturniidae family have hollow-body spines connected to venom glands^{1,2}. When the spines penetrate the skin, they inject toxins and invoke the classical manifestations. The marks have a *train tracks* appearance and are caused by the distribution of the spines^{1,2}. The combination of skin marks and intense local pain (sometimes with simultaneous lymphadenopathy), indicates a diagnosis of erucism².

Saturniidae caterpillars (**Figure A**) are distributed mainly in tropical regions, but they can live in temperate climates¹. Although caterpillars of other moth families (i.e., Megalopygidae) may also cause lesions with a similar appearance, the marks are not as clear as those of the Saturniidae family. Treatment consists of cold compresses and topical anesthetics, regardless of the moth species^{2,3}.



FIGURE A: Sequential petechial purpuric lesions, with a linear and parallel distribution pattern. Upper left: Saturniidae caterpillar.

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