Atypical presentation of burrowing bug pigmentation involving a non-acral site

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DESCRIPTION

A 31-year-old farmer hailing from a rural village of Eastern India presented with asymptomatic pigmented skin eruptions over chest for the last 2 days. Prior to the appearance of the skin lesions, he was busy working sowing paddy seeds during the rainy season. He had no history of associated fever, cough, joint pain, preceding trauma, drug intake or any contact with exogenous chemicals. Few other farmers in his village had also developed similar skin lesions over exposed body parts, which had resolved on their own without any medical intervention. Examination revealed multiple, scattered, non-blanchable, irregularly shaped brownish-black macules (2–4 mm in diameter) with streaky ends resembling lentigines, distributed over anterior chest (figure 1). The pigmented macules could not be wiped off using water, soap or acetone. Other mucocutaneous sites were uninvolved and systemic examination was unremarkable. Basic laboratory investigations were unremarkable. The skin lesions resolved on their own after 1 week without any residual changes. Based on sudden appearance of characteristic pigmentation, clustering of cases in the rainy season, spontaneous resolution, along with the history of being involved in outdoor activity clinched the diagnosis of burrowing bug pigmentation.

Cydnidae bug, also called as burrowing or burrower bug, are arthropods of the order Hemiptera, and are usually found in rural areas in the fields during monsoon months. They are recognised by the morphological adaptations for digging.¹ They borrow in soil or sand and feed on roots or other underground parts of plants and are not routinely accessible. A hydrocarbonate (odorous substance) is produced from their special glands located in thorax (in adult) and abdomen (in nymph) that acts as a repellent and chemoattractant.² This substance is responsible for the sudden onset of asymptomatic pigmented macules resembling lentigines at the site of contact on accidental crushing or pressure on the insects.³ Contrary to true lentigines, burrowing bug pigmentation particularly occurs during rainy season and spontaneously resolves within 1–2 weeks. Although there is a predilection for involvement of acral areas, appearance of pigmentation over the trunk has rarely been described.^{4 5} Dermoscopy is a useful bedside tool to differentiate this benign self-resolving pigmentation from other mimickers, including eruptive lentigines, junctional melanocytic nevi, petechiae of dengue fever and exogenous pigmentation due to chemical contact. Dermoscopic features described

Figure 1 Multiple discrete, irregularly shaped brownish-black macules resembling lentigines distributed over the chest.

in burrowing bug pigmentation include homogeneous brown-black pigmentation, frayed parallel furrows and accentuation of pigmentation around the sweat glands.^{1 5} Sudden onset and characteristic pigmentation on exposed body parts in the rainy season with spontaneous resolution are important clinical pointers towards the diagnosis of burrowing bug pigmentation.

Physicians should be aware of this newly recognised and uncommon cause of exogenous pigmentation to avoid unnecessary interventions.

Learning points

- ▶ Sudden onset lentigines—like pigmentation during monsoon season over exposed body sites (predominantly acral areas)—in a patient engaged in outdoor activity should raise the suspicion of burrowing bug pigmentation. However, non-acral areas like the trunk, neck and face may rarely be involved.
- ▶ Burrowing bug pigmentation is a self-resolving condition.

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Adequate counselling about the self-resolving nature of the condition will alleviate fear and anxiety of the patient.

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