"Shattered-Windshield" Appearance on Dermoscopy in Type 1 Photo-Onycholysis

Photo-onycholysis, whether drug induced or associated with porphyria/ pseudoporphyria, is a less recognized form of secondary onycholysis.[1] While distinctive dermatoscopic features have been described for onycholysis secondary onvchomycosis, nail psoriasis. lichen planus, or trauma, those of photo-onycholysis have not been widely reported, though they can be equally unique.

Two young males presented with onycholysis involving multiple nails. The first patient gave history of long-standing bullous lesions and was diagnosed with porphyria cutanea tarda [Figure 1a]. The second patient had a 2-week duration of nail changes, which started after receiving oral doxycycline therapy for acne [Figure 1b]. On examination, the onycholysis in both the patients had a semilunar proximal border along with evidence of subungual hemorrhages and blackish discoloration. Both the patients were diagnosed with photo-onycholysis.

On onychoscopy, nails of both patients showed a centrally placed onycholysis (distal separation of nail plate from bed) with sparing of the lateral margins of nail. It had a regular, concave border, corresponding to the distinctive half-moon-shaped

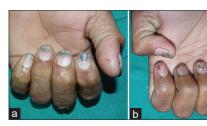


Figure 1: Clinical images of two patients with type 1 polydactylous photo-onycholysis. (a) shows a patient with porphyria cutanea tarda, while (b) shows a patient who received doxycycline therapy for acne

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disruption of onychodermal band (type 1 photo-onycholysis).[1] However, onycholyzed nail plate was most distinctive. seen to be opaque white, with bluish-black discoloration,[2] and prominent white lines arising distally, and forming a reticular pattern. This pattern was reminiscent of a "shattered-windshield" of a car [Figure 2]. The proximal edge of onycholysis was well-defined, sharp, but pale as compared to the pink nail bed. Nail bed proximal onycholysis structureless showed red-yellow-brown areas, with splinter hemorrhages and subungual hematoma formation.

We suggest that the "shattered-windshield" appearance is due to the convexity of the nail plate, which itself is proposed as a pathogenic factor for photo-onycholysis in photo-sensitized individuals. Correspondingly, more severe changes are seen in more convex nails. This peculiar pattern of breakage of nail plate resembles the shattering of a convex windshield of a

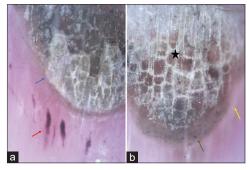


Figure 2: Dermoscopic image showing the centrally placed, half-moon-shaped onycholysis. (a) A proximal sharp linear edge (blue arrow), with a zone of pallor and multiple splinter hemorrhages with blood spots (red arrow) are seen. (b) Central onycholysis with a sharp linear edge and a zone of pallor (yellow arrow) are seen with bluish-black discoloration, and blue—gray dots and globules (brown arrow). The onycholyzed nail plate shows a reticular pattern of white lines, resembling a "shattered-windshield" (black star). [Dermlite DL4 Polarized image x10]

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car on frontal impact and can be considered indicative of photo-onycholysis.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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