

Utility of dermatoscopy in the diagnosis of Habit-Tic Nail Deformity

To the Editor,

The habit-tic deformity, also known as “washboard nails,” is a type of nail dystrophy caused by repetitive microtraumas to the nail matrix. The disorder is classified under the spectrum of nail tic disorders.¹ Conscious or unconscious rubbing, picking, and pushing back the cuticle and proximal nail fold cause a central depression running down the nail plate. Additionally, the ulnar side of the nail may present with hangnails. The entity is usually seen in adults, and the most common location is thumbnails. Unilateral or bilateral involvement can be observed.² The classical clinical presentation is characterized by a yellowish midline furrow along the long axis of the nail plate, with a series of transverse lines (Figure 1).

Dermatoscopy of nails, also known as onychoscopy, has shown encouraging outcomes in diagnosing various nail disorders. Dermatoscopic features of many nail disorders have been described in detail. However, to the best of our knowledge, no study focused on the dermatoscopy of habit-tic nail deformity has been published so far. In this study, we aimed to describe clinical and dermatoscopic findings of the entity in a series of 8 patients. Informed consent was received from all the participants.

The mean age of the patients was 32 years with a range of 14-42 years. The majority of the patients were male (n = 6). The mean duration of the deformity was 11 months. The deformity was

in the thumbnail in 7 patients and in the 4th fingernail in one patient. Only three patients showed bilateral involvement. All patients admitted to rubbing and picking their nails. Fungal infections were excluded in all cases, using direct microscopic examination with potassium hydroxide preparation. The most common dermatoscopic findings were transverse grooves (n = 8) (Figures 2, 3) and periungual scale (n = 8) (Figures 2, 3) which were observed in all patients. Macrolunula (n = 7) (Figures 2, 3), longitudinal grooves (Figures 2, 3) (n = 7), branching grooves (n = 6) (Figure 2), reddish proximal lunula (n = 5) (Figure 2), hemorrhage (n = 4) (Figure 3), and traumatic onycholysis (n = 2) (Figures 2, 3) were the other dermatoscopic findings (Table 1). Two patients reported a history of obsessive-compulsive disorder at the time of evaluation. After a thorough psychiatric evaluation, one more patient was diagnosed with obsessive-compulsive disorder. We recommended temporary occlusion of the nail folds with a tape for all patients.

In most cases of habit-tic deformity, the diagnosis can be made clinically without more investigation. In cases with atypical presentations, however, the differential diagnosis may include digital mucous cyst, onychomycosis, nail lichen planus, nail lichen striatus, bacterial paronychia, pterygium, trachyonychia, and hereditary nail

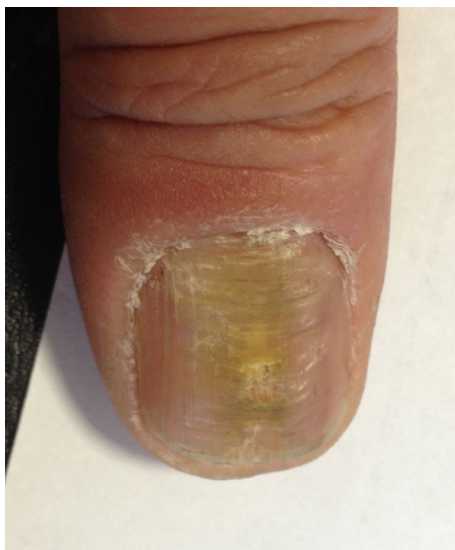


FIGURE 1 Yellowish midline furrow along the long axis of the nail plate, with a series of transverse lines: habit-tic nail deformity

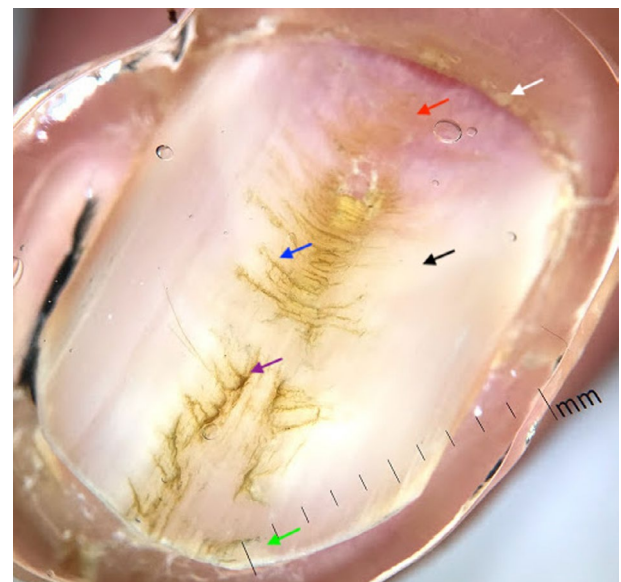


FIGURE 2 Periungual scales (white arrow), proximal reddish lunula (red arrow), macrolunula (black arrow), transverse furrows (blue arrow), branching furrows (purple arrow), and sharp linear edge indicating onycholysis (green arrow)

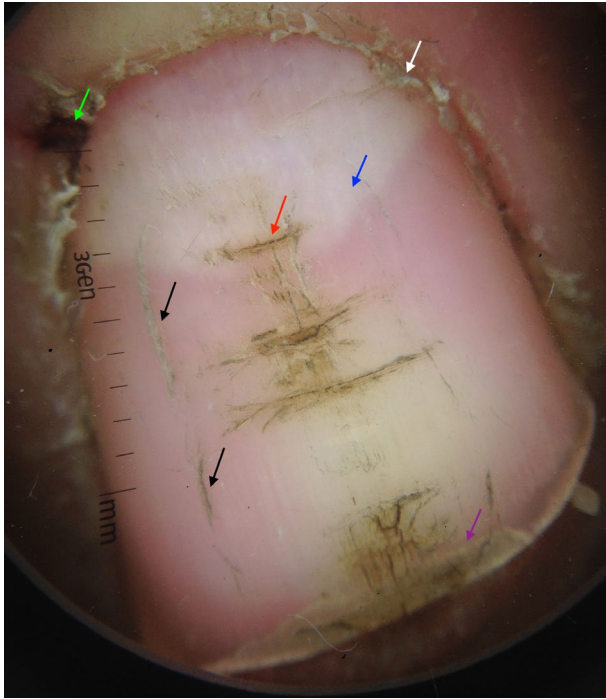


FIGURE 3 Periungual scales (white arrow), macrolunula (blue arrow), transverse furrows (red arrow), longitudinal furrows (black arrow), sharp linear edge indicating onycholysis (purple arrow), and periungual hemorrhage (green arrows)

TABLE 1 Dermatoscopic findings of the patients with habit-tic nail deformity

Macrolunula	n = 7, 87.5%
Reddish proximal lunula	n = 5, 62.5%
Periungual scale	n = 8, 100%
Transverse furrows	n = 8, 100%
Longitudinal furrows	n = 7, 87.5%
Branching furrows	n = 6, 75%
Hemorrhage	n = 4, 50%
Onycholysis	n = 2, 25%



dystrophies.³ In such cases, dermatoscopy may have two main roles. The first one is more clear and augmented visualization of the findings that can also be viewed with the naked eye, such as transverse/longitudinal grooves and macrolunula. The second one is the identification of hard-to-observe signs of the repetitive microtraumas, such as microhemorrhage, onycholysis, proximal reddish lunula, and branching grooves.

The main differential diagnosis of habit-tic nail deformity is median canalicular dystrophy of Heller which usually presents with longitudinal splitting of the nails. It is believed to be caused by a temporary defect in the matrix interfering normal nail formation.⁴ Some authors consider this entity as a subset of habit-tic nail deformity.⁵ The lack of a history of manipulating nails and the presence of a median longitudinal split formation are the clues in distinguishing median canalicular dystrophy of Heller from habit-tic nail deformity.

To conclude, in this study, we identified peculiar dermatoscopic features which may serve as useful clues in the differential diagnosis of habit-tic nail deformity. It is obvious that more studies with larger sample sizes are needed to empower conclusions deduced in the present study.

CONFLICT OF INTEREST

None to declare.

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