A 14-year-old female presented to the office in July 2023 with asymptomatic green nail discoloration, which was first noticed after removing acrylic nails worn for one month (Figures 1 and 2). Given the classic appearance and history of extended acrylic nail wearing, a diagnosis of green nail syndrome (GNS) was made. Treatment was initiated with topical gentamicin 0.3 % solution daily under the distal nail plates. Daily dilute vinegar soaks were also recommended.

GNS, also known as chloronychia or Goldman-Fox syndrome, is a rare infection characterized by green discoloration of the nail plate; proximal paronychia and distal onycholysis often coexist [1]. GNS is predominately caused by Pseudomonas aeruginosa infection, leading to blue-green nail discoloration due to production of pyocyanin and pyoverdine [2]. It is prudent to know that in darker skin types, the green color may appear with hues of brown or yellow. Predisposing factors include water exposure, nail trauma, and artificial nail use, especially prolonged beyond two to three weeks. GNS is more common in homemakers, barbers, dishwashers, bakers, and medical personnel, and can be regarded as an occupationally triggered disease [3]. The differential diagnosis includes subungual hematoma, malignant melanoma, infections caused by other pathogens (such as Aspergillus, Candida, and Proteus), and chemical exposure to solutions containing pyocyanin or pyoverdine [4].

Our patient’s prolonged attachment of acrylic nails subjected her to sustained water entrapment between the natural nail plate and the artificial acrylic nails, leading to infection. Classic clinical features and appropriate history are sufficient for diagnosis. Treatment with topical aminoglycosides or fluoroquinolones demonstrate therapeutic efficacy within one to four months [5, 6]. Acetic acid solution can be used to expedite the eradication of Pseudomonas. If topical treatment fails, oral therapy with ciprofloxacin 500 mg twice daily for two to three weeks can be considered [7].

Recognizing green nails and elucidating history of water exposure, nail trauma, or artificial nail use is critical to diagnose GNS, which can prevent unnecessary...
costly laboratory evaluation and lead to prompt initiation of topical aminoglycosides or fluoroquinolones to hasten resolution.

**Research ethics:** Not applicable.

**Informed consent:** The patient and parent in this study provided written informed consent prior to participation.

**Author contributions:** All authors provided substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; all authors drafted the article or revised it critically for important intellectual content; all authors gave final approval of the version of the article to be published; and all authors agree to be accountable for all aspects of the work in ensuring that question.

**Competing interests:** None declared.

**Research funding:** None declared.

**Data availability:** Not applicable.

### References