Case report

The record of onychomadesis

Yat-Fung Shea, MBBS *, Christie Wing-Man Li, MBBS, Chun-Yin Chan, MBBS

Department of Medicine, Queen Mary Hospital, The University of Hong Kong, 102 Pok Fu Lam Road, Hong Kong

A R T I C L E   I N F O

Article history:
Received 23 June 2012
Received in revised form
25 July 2012
Accepted 2 August 2012

Keywords:
Aged
Nail
Onychomadesis

A B S T R A C T

A 79-year-old woman presented with nail abnormalities on her right hand. She had hepatitis B liver cirrhosis and osteoporosis. Physical examination reviewed the onychomadesis of the index, middle and ring fingers of her right hand. History reviewed that the patient was admitted 2 months previously because of osteoporotic insufficiency pelvic fracture and cellulitis on her right foot. There was no history of traumatic injury to her fingers. Fungal smear and nail culture were negative. Over the next few weeks, the fingernails involved grew out. It was likely that systemic stress due to cellulitis caused the onychomadesis.

Copyright © 2012, Asia Pacific League of Clinical Gerontology & Geriatrics. Published by Elsevier Taiwan LLC. Open access under CC BY-NC-ND license.

1. Introduction

Nail changes offer important clues to possible underlying medical diseases. In addition, nail growth is sensitive to systemic medical conditions or drugs, acting as a record to the stress that the body has encountered. We report onychomadesis in an elderly woman due to previous cellulitis of the foot and osteoporotic pelvic fracture.

2. Case report

A 79-year-old woman presented with nail abnormalities on the right hand for the past 2 months. She was known to have hepatitis B liver cirrhosis that was being treated with entecavir. She was also taking paracetamol, calcium carbonate, multivitamins, alendronate, tramadol and famotidine at the time of presentation. Physical examination reviewed the presence of proximal detachment of the nail plate (onychomadesis) of the index, middle and ring fingers of the right hand (Fig. 1A–C). The condition became even more obvious after 3 weeks of observation. There was no alopecia, no blistering and no mucosal erosion. The patient did not have chronic diarrhea. Scrapings of the yellow crumbling debris across her fingernails were negative for fungal smear and culture. History revealed that the patient was admitted 2 months previously because of cellulitis of the right dorsum of the foot that required intravenous ampicillin and amoxicillin, and that she also complained of severe lower back pain due to osteoporotic insufficiency pelvic fracture that was managed with analgesics. There was no history of traumatic injury to the fingers. The patient was reassured on her nail condition. Over the next few weeks, the fingernails involved grew out.

3. Discussion

Normally, the proximal matrix forms the dorsal aspect of the nail plate while the distal matrix forms the ventral part of nail plate. Clinical features of nail matrix arrest usually present 4–8 weeks after injury. The severity of nail matrix arrest could be presented clinically as Beau's lines (i.e., slight indentation of the nail plate) to more severe presentation such as onychomadesis. Onychomadesis (onycho- refers to nail; medesis means "to shed") is caused by arrest of nail plate growth due to a lengthened period of insult. The causes could be classified as local or systemic. Local causes of onychomadesis include physical trauma and local fungal infections. Systemic causes include Kawasaki's disease, infection (e.g., scarlet fever, measles, streptococcal infection, and hand, foot and mouth disease), Stevens–Johnson syndrome, severe illness, high fever, severe psychological stress, and drug reactions including drug allergy. Chemotherapeutic agents and antiepileptic agents (e.g., valproate) can also cause the condition. The absence of blisters, mucosal erosions, alopecia, and chronic diarrhea makes pemphigus vulgaris or Cronkhite–Canada syndrome unlikely. Our patient did not have any apparent cause for this condition except the episode of cellulitis infection 2 months previously. The onychomadesis was likely the result of that episode of systemic stress caused by the cellulitis. The patient's nails have demonstrated that period of stress.

* Corresponding author. Department of Medicine, Queen Mary Hospital, The University of Hong Kong, 102 Pok Fu Lam Road, Hong Kong. E-mail address: elphashea@gmail.com (Y.-F. Shea).

2210-8335 Copyright © 2012, Asia Pacific League of Clinical Gerontology & Geriatrics. Published by Elsevier Taiwan LLC. Open access under CC BY-NC-ND license.

http://dx.doi.org/10.1016/j.jcgg.2012.08.001
Fig. 1. (A) Proximal nail detachment affecting the index, middle and little fingers of the right hand. (B) Close-up view of the right index and middle fingers. (C) Close-up view of the right index and middle fingers 3 weeks later, with even more obvious proximal detachment.

References