



Figura 1. Líneas de Beau. A. Vista panorámica. B. Acercamiento.

Conflicto de interés

El autor del manuscrito declara no tener ningún conflicto de interés.

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Beau's lines secondary to acute illness in an elderly woman

Beau's lines were first described in 1846 by Justin Honore Simon Beau, who observed they appeared weeks after the development of acute febrile diseases, becoming a retrospective indicator of them (1).

These lines look like transverse depressions and focal thinning at the nail bed level due to the slowing of the growth of the nail plate on the dorsal ventral plate (2). Then, they progress distally with the normal growth of the nail and may disappear at the side edges of the nail plate.

Dorsal plate growth from the proximal nail matrix can be affected by various acute systemic diseases (3). Although the exact mechanism for the genesis of Beau's lines is unknown, it is considered that their presence reflects a temporary cessation of mitotic activity at the proximal nail matrix level due to a decrease in blood flow and metabolism (4). This may be caused by systemic and acute febrile diseases, renal failure, Stevens-Johnson syndrome, malnutrition, pemphigus, chemotherapeutic agents for cancer, or exposure to extreme cold in Raynaud's disease patients (4-6).

When most of the nails are affected, it is associated with acute systemic diseases, dermatological

diseases, infections, exposure to drugs or toxic agents (5,6). Conversely, when one or a few nails are affected, the suggested etiological factors are local trauma or carpal tunnel syndrome (4). The treatment is to manage the base condition and with its resolution, the appearance of the nail returns to normal when it is finished growing (3).

Case presentation

A case of a 77-year-old woman with history of hypertension, diabetes mellitus and dyslipidemia is presented. She was admitted to the emergency room having a five-day history of dyspnea, fever, productive cough, and altered consciousness. She was diagnosed with community-acquired pneumonia and treatment was started. At the hospital, she developed respiratory failure, requiring mechanical ventilation and was transferred to the intensive care unit. When her clinical condition improved, she was moved to the general ward and was discharged. Two months later, during a physical examination at the outpatient clinic follow-up, Beau's lines were observed in her fingernails (Figures 1 A and B).

The presence of Beau's lines in this patient is associated with the condition of severe acute illness requiring management in the intensive care unit. As the nails grow about one mm every six to ten days (5), the distance between the Beau line and the proximal edge of the nail plate can help to determine the time when the acute event occurred, which in this case was about two months prior.

Therefore, it is important for physicians to perform the physical exam of the nails during clinical practice, because a proper assessment can provide important clues for the diagnosis of several systemic diseases.

Ethical considerations

For the publication of this scientific study, we had a signed informed consent from the patient.

Referencias

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