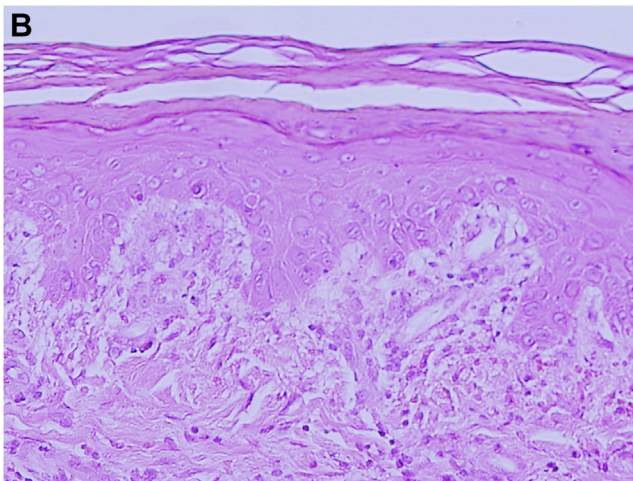


## Erythematous Plaques on Legs and Feet in a Patient With Hepatitis C



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**Question:** A 72-year-old woman presented with a 6-month history of multiple erythematous plaques over her bilateral lower limbs. She had a history of hepatitis C for 10 years and was regularly followed up in the gastrointestinal outpatient department. Her  $\alpha$ -fetoprotein level was within the normal range until 1 year ago, but it increased to 29.1 ng/mL (reference value, <15 ng/mL) 1 month after the onset of skin lesions. Magnetic resonance imaging revealed 1.9-cm nodular lesions in S3 of the hepatic lobule, which appeared hypointense on T1-weighted images and hyperintense on T2-weighted images with arterial enhancement, and then faded in the portal and equilibrium phase. The diagnosis of hepatocellular carcinoma was made based on image study.

On physical examination, multiple itchy well-marginated annular erythematous scaly plaques with purpuric change over her bilateral lower legs and feet were noted (Figure A). Skin scraping test showed a negative result for fungus infection. A skin biopsy was performed, and histopathology revealed parakeratosis, mild acanthosis with focally dyskeratotic cells, and epidermal pallor in the epidermis (Figure B, stain: hematoxylin and eosin, magnification  $\times 40$ ). Hypozincemia (54.3  $\mu\text{g}/\text{dL}$ ; normal range, 60–120  $\mu\text{g}/\text{dL}$ ) was also noted in the laboratory examination.

What is your diagnosis?

**Look on page 39 for the answer and see the Gastroenterology website ([www.gastrojournal.org](http://www.gastrojournal.org)) for more information on submitting your favorite image to Clinical Challenges and Images in GI.**

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### Conflicts of interest

The authors disclose no conflicts.

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## Answer to Image (Page 38): Necrolytic Acral Erythema

A diagnosis of necrolytic acral erythema was made according to the clinical and histopathologic findings. The patient received oral zinc supplement and topical steroid therapy, and the skin lesions improved after treatment for 2 weeks. She also received 15 sessions of transcatheter arterial chemoembolism for treatment of hepatocellular carcinoma. Unfortunately, the patient died of pneumonia complicated with respiratory failure 3 years later.

Necrolytic acral erythema was first described in 1996 by el Darouti and Abu el Ela.<sup>1</sup> The clinical manifestations were erythematous to violaceous plaques with sharply defined borders surrounded by adherent scales, typically distributed on acral area. It is commonly reported in patients with hepatitis C, and the pathogenesis is related to disruption of zinc homeostasis due to hepatitis C virus infection.

Notably, there is growing evidence that hypozincemia may be associated with human hepatocarcinogenesis in patients with hepatitis C, and it is also an independent poor prognostic factor for patients with early hepatocellular carcinoma.<sup>2,3</sup> Physicians should be aware of this zinc deficiency–related cutaneous disorder in patients with hepatitis C virus, because it may be a poor prognostic sign in such patients.

**Keywords:** Hepatitis C; Hepatocellular Carcinoma; Necrolytic Acral Erythema.

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