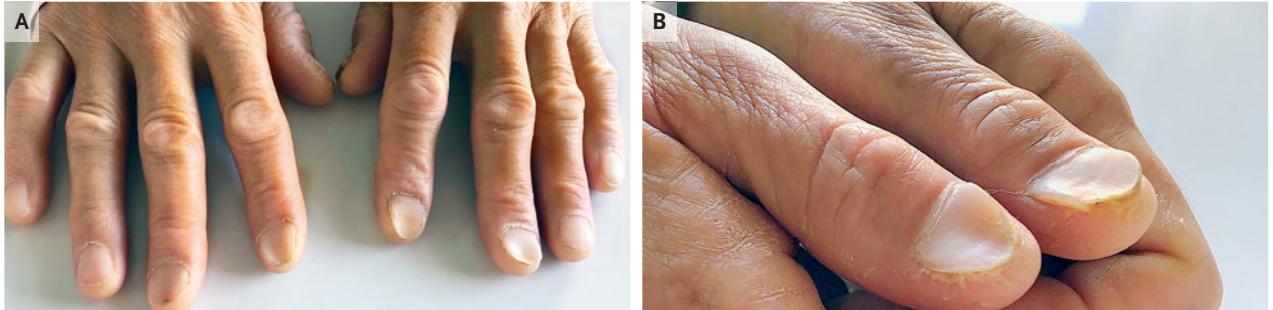


IMAGES IN CLINICAL MEDICINE

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Koilonychia in Iron-Deficiency Anemia



A 54-YEAR-OLD WOMAN PRESENTED TO THE PRIMARY CARE CLINIC WITH fatigue and a 7-year history of intermittent hemorrhoidal bleeding. On examination, she appeared pale and had spoon-shaped nails (koilonychia) on the second and third fingers (Panel A) and the thumb (Panel B) of both hands. The laboratory evaluation showed a hemoglobin level of 7.8 g per deciliter (normal value, 12 to 15), a mean corpuscular volume of 66 fl (normal value, 80 to 95), a platelet count of 550,000 per microliter (normal value, 150,000 to 400,000), an iron level of 23 μg per deciliter (normal value, 40 to 155), a ferritin level of 3 ng per milliliter (normal value, 12 to 150), and a total iron-binding capacity of 470 μg per deciliter (normal value, 250 to 400). The findings on upper gastrointestinal endoscopy and colonoscopy were normal, except for the presence of hemorrhoids. Because bleeding from hemorrhoids does not typically cause this degree of anemia, further evaluation for other causes of iron deficiency was undertaken. Stool examination for ova and parasites and laboratory testing for celiac disease were negative, and results on abdominal ultrasonography were normal. Koilonychia is associated with iron-deficiency anemia and may also be hereditary, idiopathic, or associated with nail trauma or solvent exposure. The first three digits may be preferentially affected. The patient was treated with oral iron supplementation. At the 3-month follow-up, her fatigue had lessened, and her hemoglobin level had increased to 11.2 g per deciliter; however, her nails appeared unchanged.

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