

CLINICAL IMAGES

Muehrcke lines

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Figure 1: Fingernails of a 45-year-old man with chronic hypoalbuminemia related to cirrhosis, showing multiple narrow, parallel, white transverse bands that disappeared on blanching. The bands were nonpalpable and separated by normal pink nail, suggestive of Muehrcke lines. Clubbing is also visible.

A 45-year old man with a long history of heavy alcohol use presented to an outpatient clinic with dyspepsia. He had no history of jaundice, gastrointestinal bleeding or ascites.

On examination, firm hepatomegaly was palpable two fingers below the costal margin. The patient's nails had multiple, narrow and parallel, white transverse bands separated by normal pink nail (Figure 1). The bands were not raised and disappeared on blanching, suggesting origin in the nail bed and a normal nail plate. We also noticed pronounced clubbing.

Laboratory investigations showed that the patient's blood was nonreactive for viral markers (hepatitis B surface antigen, antibodies to hepatitis C virus). The patient's serum albumin was 27 (normal 36–50) g/L. Abdominal ultrasonography showed hepatic nodularity and splenomegaly, and upper gastrointestinal endoscopy showed small varices. We diagnosed alcohol-related cirrhosis and portal hypertension.

Muehrcke lines are changes to the nail accompanying chronic hypoalbuminemia. They are usually narrow pairs (although our patient had triplets) of whitish, nonpalpable, transverse bands on the fingernails (it is uncommon for them to appear on the thumbnails).¹ Muehrcke lines differ from Beau lines, which are palpable, and Mees lines, which do not disappear on blanching.² Muehrcke lines are related to changes in the vascular bed rather than the nail itself, hence they do not move with nail growth.³ They may fade when serum albumin levels increase. Clubbing, as seen in our patient, may be idiopathic, but it is known to occur in cirrhosis, pulmonary disorders, infective endocarditis and inflammatory bowel disease.⁴

References

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