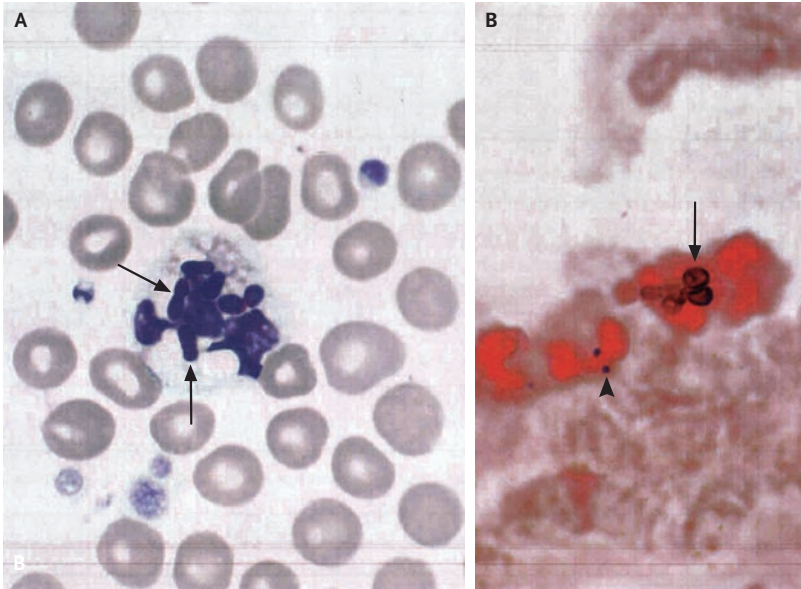


IMAGES IN CLINICAL MEDICINE

Peripheral Smear with *Malassezia furfur*

Parul Bhargava, M.B., B.S.
 Lorinda P. Longhi, B.S., M.T.
 Beth Israel Deaconess Medical Center
 Boston, MA 02215
 pbhargav@bidmc.harvard.edu

A 53-YEAR-OLD MAN WITH CROHN'S DISEASE, SHORT-BOWEL SYNDROME that required total parenteral nutrition, a history of recurrent catheter infections, hypertension, chronic renal insufficiency, and mitral regurgitation presented with fevers of 2 weeks' duration. He had elevated liver enzyme levels (aspartate aminotransferase, 45 U per liter; alanine aminotransferase, 97 U per liter; alkaline phosphatase, 679 U per liter; and total bilirubin, 7.3 mg per deciliter [125 μ mol per liter]). Abdominal ultrasonography and endoscopic retrograde cholangiopancreatography showed no abnormalities. Blood was obtained for culture, and the patient was discharged while receiving intravenous levofloxacin. He returned after 5 days because of continued fevers, with temperatures as high as 102°F (39°C). A peripheral-blood smear showed intracellular and extracellular budding yeasts that were 2 to 4 μ m in diameter with Wright's stain (Panel A, arrows) and Gram's stain (Panel B, arrow), some with collarettes, along with cocci that were gram-positive (Panel B, arrowhead). Although initial blood cultures grew only coagulase-negative staphylococci, the fungus *Malassezia furfur* grew on subculture with lipid supplementation. The patient was subsequently treated with amphotericin B, daptomycin, and vancomycin with clinical improvement. Repeat lipid-supplemented fungal cultures 2 months later were negative. Infection with *M. furfur* is associated with the use of intravenous lipid supplementation, and the diagnostic evaluation requires such supplementation as well. As seen in this case, the peripheral-blood smear remains a valuable diagnostic tool.

Copyright © 2007 Massachusetts Medical Society.