symptoms of connective tissue disease, testing for parvovirus B19 antibodies may be helpful in differentiating between transient illness and connective tissue disease and in making decisions about patient management.

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LACTOCOCCUS GARVIEAE SEPTICEMIA WITH LIVER ABSCESS IN AN IMMUNOSUPPRESSED PATIENT

To the Editor:

Lactococcus garvieae was first isolated from cases of bovine mastitis, and it may also infect several species of fish (1–3). Infection in humans is rare (4–6).

A 68-year-old woman was admitted to our intensive care unit with gastrointestinal bleeding. Two months before admission, a cholangiocarcinoma involving the intrahepatic branches of the biliary tract had been discovered. A Teflon biliary prosthesis was placed in each of the branches, and treatment with prednisone was begun. No recent history of infection or contact with fish or animals was reported.

On admission, the patient had no abdominal pain, fever, or chills. Physical examination showed a cachectic, pale, and icteric woman. Her temperature was 37.1°C. Other clinical findings were normal. Laboratory studies showed a hemoglobin level of 6.6 g/dL, a hematocrit of 26%, a white blood cell count of 28,900/μL with 86.6% neutrophils, a total bilirubin level of 121 μM, an aspartate aminotransferase level of 181 IU/L, and a lactate dehydrogenase level of 694 IU/L. Gastrointestinal endoscopy revealed active bleeding in the second portion of the duodenum, which suggested hemobilia.

The patient received a blood transfusion, and treatment with omeprazole was begun. A retrograde cholangiography showed obstruction of the two prostheses and an intrahepatic cavity (4 cm in diameter) that communicated with the left intrahepatic branch of the biliary tract, suggesting abscess. Three blood cultures obtained at admission grew streptococci. The prostheses were removed and treatment with amoxicillin (1 g three times daily), netilmicin (250 mg daily), and metronidazole (500 mg three times daily) was begun. The organism was identified as *L. garvieae* using a rapid system for identification of streptococci and related organisms (rapid ID 32 STREP; bioMérieux sa, Marcy-l'Etoile, France), which consists of 32 biochemical reactions that are read after an incubation period of 4 hours. The organism was susceptible to amoxicillin, tetracycline, erythromycin, vancomycin, and teicoplanin. The patient died on the 12th hospital day from a massive gastrointestinal hemorrhage.

There have been only a few reports of human infection with lactococci (5,7,8). However, because it is difficult for many microbiology laboratories to distinguish between lactococci and enterococci (5), human infections may be underdiagnosed. In addition, the published biochemical and antigenic characteristics of *L. garvieae* do not differentiate this pathogen from *L. lactis* (2). A specific polymerase chain reaction assay or antibiotic susceptibility tests may help distinguish the two pathogens (2,4,5). Indeed, *L. garvieae* seems to be more resistant to clindamycin than is *L. lactis* (2,4).

Although *L. garvieae* could not be cultured from the infected bile in our patient, we believe that it was the causal agent of the liver abscess, and this collection was the primary source of bacteremia.

Prior reports have identified approximately 15 strains from clinical specimens, most of which were cultured from blood (4,6). In 3 cases, the pathogen involved prosthetic valves (5). The significance of the other isolates was less clear (6). In 1998, a case of septicemia and native valve endocarditis was reported (5). As in our case, the patient was immunosuppressed, suggesting the possible invasiveness of this pathogen in these patients. Physicians should be aware of the possible severity of the disease and institute prompt antibiotic treatment, particularly in immunosuppressed patients.

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ACUTE BACTERIAL ENDOCARDITIS DURING GRANULOCYTOPENIA IN AN ALLOGENIC MARROW TRANSPLANT RECIPIENT

To the Editor:

Although granulocytopenia resulting from chemotherapy predisposes patients to a wide variety of infectious complications, endocarditis has seldom been described (1). We report a case of bacterial endocarditis on a native valve after allogenic marrow transplantation with subsequent neutropenia.

A 53-year-old man underwent an allogenic marrow transplant from an HLA-matched, unrelated donor as treatment for myelodysplastic syndrome (FAB subtype refractory anemia with excess blasts in transformation). Pretransplant cytoreduction consisted of hyperfractionated whole-body radiotherapy (1,350 cGy) and cyclophosphamide (120 mg/kg). Graft-versus-host disease prophylaxis consisted of intravenous cyclosporine (1.5 mg/kg twice daily) and methotrexate (15 mg/m^2 on day 1 and 10 mg/m^2 on days 3 and 6 posttransplantation).

Five days posttransplant, the patient developed severe oral pain and gingival bleeding. Three days later he had a new fever (39.6°C), accompanied by rigors. On examination, he appeared ill, with extensive hemorrhagic buccal mucositis. The left subclavicular fossa was erythematous, tender, and indurated along the subcutaneous course of the central venous catheter tract. His absolute neutrophil count was 0.0 cells/mm^3, the hemoglobin was 9.1 g/dL, and the platelet count 13,000 cells/μL. Serum aminotransferase and creatinine levels and a chest radiograph were normal.

Intravenous ticarcillin-clavulanic acid (3 g every 4 hours), gentamicin (5 mg/kg daily), and vancomycin (1 g every 12 hours) were instituted. The fever resolved within 48 hours. On day 12 after transplantation, blood cultures from all central venous catheter ports grew a gram-negative bacteria (from anaerobic cultures at 70 hours and from aerobic cultures at 88 hours). *Haemophilus parainfluenzae* was isolated. Transthoracic and transesophageal echocardiography for evaluation of a new pansystolic murmur showed a single 8-mm vegetation on an otherwise normal aortic valve.

The patient continued to improve and all subsequent blood cultures were sterile. The neutropenia resolved 21 days after transplantation. The left central venous catheter tract infection improved. Broad-spectrum antibiotics were changed to intravenous ceftriaxone (2 g daily), and he was discharged home to complete 6 weeks of therapy. There was no evidence of relapse at 6-month follow-up.

Endovascular infections associated with *Haemophilus* species are uncommon and account for about 1% of all cases of infectious endocarditis (2–4). *Haemophilus* species associated with endocarditis include *H. influenzae, H. parainfluenzae, H. aphorpholus*, and *H. paraphropholus*. The latter three organisms, in the context of current understanding of endocarditis, are grouped as "HACEK" organisms (*Haemophilus, Actinobacillus, Cardiobacterium, Eikenella*, and *Kingella*) because of their common clinical and microbiologic features: slow-growing, fastidious bacteria; large vegetations; and frequent embolic occlusion of medium-sized and even large arteries. The primary sources of bacteremia associated with *Haemophilus* species endovascular infection include dental procedures, upper respiratory tract infections, and pneumonia (3–7).

Although neutrophils are not an essential component of valvular vegetations, bacterial endocarditis is rarely encountered in granulocytopenic subjects, even in those with persistent bacteremia due to *Streptococcus*, *Staphylococcus,* or *Enterococcus* species. We suspect that severe mucositis in our patient was the portal of entry for the *H. parainfluenzae* blood stream infection. Secondary infection of the central venous catheter tract might have led to high-grade bacteremia, promoting endocarditis; however, we were able to "treat through" the tunnel infection without removal of the catheter.

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