

CASE REPORT

AMEBIC LIVER ABSCESS IN AN ELDERLY AIDS PATIENT

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Abstract. An elderly bisexual male AIDS patient, whose CD4 cell count was 128/mm³ and HIV-RNA was 3.0x10⁵ copies/ml, was admitted because of amebic liver abscess and poor nutritional condition. He was treated with daily doses of 1,500 mg of metronidazole for 14 days for amebic liver abscess and with anti-HIV drugs; good therapeutic results were observed. Our study indicates that amebic liver abscess is easily treated by appropriate administration of metronidazole even in an old AIDS patient receiving anti-HIV drugs with low CD4 cell counts and high HIV-RNA values.

INTRODUCTION

Although *Entamoeba* infections are generally thought to be restricted to *E. dispar* in homosexuals and HIV-infected persons in Western countries (Reed *et al*, 1991; Fätkenheuer *et al*, 1997), symptomatic amebiasis due to *E. histolytica* is common in homosexuals and HIV-infected persons in Japan (Sanuki *et al*, 1995). Most cases co-infected with HIV and amebic liver abscess are middle-aged (Sanuki *et al*, 1995), and elderly patients are very rare. To our knowledge, there is no report of the treatment of amebic liver abscess in elderly patients (over 70-years-old) afflicted with acquired immunodeficiency syndrome (AIDS), and the recommended duration and daily doses of antiamebics for treatment of these patients, especially those with high HIV-RNA values, are unknown. Hence we report this case.

A 71-year-old Japanese bisexual man was first diagnosed with AIDS with candida esophagitis on December 8, and he was admitted to our department on 12 when abdominal ultrasonography revealed a spherical-shaped abscess in an S⁶ lesion of the liver. Before admission, he had never been given anti-HIV drugs or anti-amebic drugs. On admission, his nutritional state was poor and body temperature was 38.9°C. His blood and serum laboratory data were as follows: white blood cell count, 5,600/mm³; CD4 cell count, 128/mm³; red blood cell count, 195x10⁴/mm³; hemoglobin, 6.6g/dl; hematocrit, 19.6%; platelet count, 6.9x10⁴/mm³; total protein,

8.3g/dl; albumin, 2.2g/dl; C-reactive protein, 19mg/dl; and TPLA, 441 TU. Serum antibody against *E. histolytica* was positive. His stool was not bloody, and neither trophozoite nor cyst of *Entamoeba* was identified in his stool. His liver abscess was diagnosed as amebic because of its spherical shape and the positive serum anti *E. histolytica* antibody. He was treated with oral administration of azidothymidine (AZT), lamivudine, and indinavir from December 13 to 25, 1997 to combat the HIV infection, and the regimen was changed to oral administration of sanilvudine, lamivudine, and indinavir from December 25, because of leukopenia due to the AZT. HIV-RNA value was 3.0x10⁵ copies/ml on December 24. He was also treated with oral administration of fluconazole from December 12 to 26 for candida esophagitis, and daily oral administration of 1,500 mg metronidazole from December 12 to 26 for amebic liver abscess. No side effect of metronidazole was found. Abscess drainage was not available. According to an abdominal CT scan on December 17, 1997, the size of the liver abscess was 7x6x5 cm (Fig 1). On January 8, 1998, the size had decreased to 6x4x4 cm. The patient was discharged on January 20, 1998. The liver abscess continued to shrink after discharge, measuring 4x3x4 cm and 2x2x2 cm on February 6 and May 21, 1998, respectively. The CD4 cell count was 246/mm³ and HIV-RNA value was under 4.0x10² copies/ml on April 24, 1998.

Metronidazole is presently the drug of choice for invasive amebiasis and is commonly used throughout the world. Administration of 1,500 mg of metronidazole for 10 days is generally used for the treatment of amebic liver abscess in adult patients with normal immunity in Japan, and good therapeutic results are observed. When our patient was treated

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Fig 1—Contrast-enhanced CT scan showing the liver abscess in an S⁶ lesion, left renal cysts, and an enlarged gall bladder.

with daily doses of 1,500 mg metronidazole for 14 days together with anti-HIV drugs, good therapeutic results were obtained. However, a shorter duration or lower daily doses of metronidazole may also have been effective in our patient since it has also been reported that amebic colitis in HIV-infected persons with reduced CD4 cell counts can be effectively treated with 1,000 mg of metronidazole daily for 10 days (Ohnishi *et al*, 1996). Given that

a good therapeutic result was obtained by appropriate administration of metronidazole and anti-HIV drugs even in an elderly AIDS patient with a low CD4 count and high HIV-RNA value, physicians should carefully watch for invasive amebiasis in HIV-infected persons.

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