

Miliary Tuberculosis Presenting as Acute Hepatitis and Haemophagocytic Syndrome

Z Ioannis, G Konstantinos

Citation

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Abstract

Miliary tuberculosis is the result of the hematogenous dissemination of mycobacterium tuberculosis. We report a case of miliary tuberculosis that presented as acute hepatitis with jaundice and haemophagocytic syndrome.

CASE REPORT

A 72-year-old man was admitted because of high fever. Ten days prior to admission, he had experienced fatigability and fever. He had no history of hospitalization, transfusions, alcohol consumption or medication intake. On admission he had high fever (40°C), the sclerae were icteric, liver was palpable 6cm below the right costal margin and the spleen was mildly enlarged. The hematocrit was 33.4 percent (MCV 88fl, MCH 31 pg, MCHC 33gr/dl); the leukocyte count was 3900cu/μl with 64 percent neutrophils, 21 percent lymphocytes and 12 percent monocytes; and the platelet count was 82700cu/μl. Prothrombine time was 14 seconds compared to 12 seconds for the control. Blood chemistry were as follows: aspartate aminotransferase 1080 U/L, alanine aminotransferase 1276 U/L, total bilirubin 12,4 mg/dl, direct bilirubin 10,8 mg/dl, alkaline phosphatase 746 U/L, g-glutamyltranspeptidase 820U/L and albumin 2,85 mg/dl. Tuberculin skin test was negative. Blood and urine cultures were sterile and sputum smear revealed no tuberculus bacilli. Chest x-ray film and CT scan were normal. An abdominal ultrasonogram demonstrated an enlarged liver and spleen and so did the abdominal CT scan. Bone marrow biopsy revealed haemophagocytic syndrome and the cultures were sterile. The serologic studies for viruses, bacteria or parasites that could cause acute hepatitis were negative. Autoimmune hepatitis was excluded.

Although the patient took a series of antimicrobial drugs, fever continued to be high and there were no change regarding the laboratory tests. Granulomatous hepatitis was diagnosed on liver biopsy. Thirty days after the onset of fever chest examination revealed diffuse end-inspiratory

rales and chest x-ray films showed miliary shadows and diffuse infiltration in both lung fields. Mycobacterium tuberculosis was identified and grown in gastric fluid and liver samples.

Based on these findings tuberculosis was diagnosed and treatment was started. The patient was afebrile within 9 days and the laboratory tests had returned to normal. One year after this episode, the patient is in good health and the serologic studies for the infectious agents that could cause acute hepatitis are still negative.

DISCUSSION

Microscopic involvement of the liver approaches 100 percent in the cases of miliary tuberculosis¹, but acute hepatitis and jaundice are very rare manifestations of the disease^{2,3}.

To our knowledge this is the first case of miliary tuberculosis presenting as acute hepatitis^{2,3} along with tuberculosis-associated haemophagocytic syndrome^{4,5}.

References

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Author Information

Zacharos Ioannis, MD

Internist, 2nd department of Internal Medicine, West Attica General Hospital

Galariotis Konstantinos, MD, PhD

Internist, Director of 2nd department of Internal Medicine, West Attica General Hospital