

Epidemiological features, hematologic characteristics and clinical manifestations in adult patients with brucellosis

Mehdi Besharat, Farhad Abbasi*, Soolmaz Korooni

Infectious Diseases and Tropical Medicine Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Brucellosis is a disease with worldwide distribution. Despite its control in many countries, it remains endemic in Iran (1). A broad spectrum of clinical manifestations ranging from malaise to brain abscess is seen in brucellosis (2).

In a retrospective study, we evaluated 140 patients with brucellosis admitted to Loghman hospital during a 6-year period. Hematologic and serologic characteristics and clinical manifestations were evaluated.

Our study population included %67 males and %33 females, of whom 61% were lived in rural areas and 47% had history of cattle contact. Meanwhile, 30% of patients had positive family history of brucellosis and 9.2% were IV drug user (IDU) that may be an accidental finding.

Clinical manifestations were as follow: fever (90%), chills (83%), sweating (87%), night sweating (83%), back pain (84%), arthritis (40%), splenomegaly (23%), and hepatomegaly (15%).

Laboratory test abnormalities are presented below: lymphocytosis (17%), leukocytosis ($>12000/\text{mm}^3$) (4%), leucopenia ($<4000/\text{mm}^3$) (17%), pancytopenia (8%), ESR >50 (5%), ESR >20 (46%), CRP+++ (80%), and anemia (20%).

Duration of admission was less than 10 days in 62% and more than 10 days in 30%. Totally, 8% of patients leaved hospital during the first day of admission. Mortality rate was 0.7% (one patient).

In Hasanjani study on 469 brucellosis cases, 60.8% were from rural areas and 66.3% presented during spring or summer (3).

The symptoms of brucellosis could be nonspecific (e.g., fever, sweats, malaise, anorexia, headache, back pain). The onset can be insidious or acute, generally beginning within 2 to 4 weeks after inoculation. Some patients complain of malodorous sweat and a peculiar taste in the mouth. Depression is common and often out of proportion to the severity of other symptoms. Compared to the plethora of somatic complaints, physical abnormalities may be few (4). Fever, arthralgia, profuse sweating and anorexia are the symptoms most often observed (5). Laboratory findings include anemia, leukopenia, neutropenia, lymphocytopenia, monocytosis, eosinophilia, thrombocytopenia and pancytopenia. Leukocytosis and lymphocytosis are extremely rare and ESR and serum C-reactive protein levels are mildly elevated (2). Antimicrobial therapy relieves symptoms, shortens the duration of illness, and reduces the incidence of complications and relapse (6). Pasteurization of dairy products and education regarding fresh cheese must be pursued for eradication of brucellosis. A major risk factor for

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Reprint or Correspondence: Farhad Abbasi, MD.
Infectious Diseases and Tropical Medicine Research Center,
Shahid Beheshti University of Medical Sciences, Tehran, Iran
E-mail: f_abbasi55@yahoo.com

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acquiring brucellosis is the existence of another infected family member. Therefore screening family members of an index case of brucellosis may lead to the detection of additional cases (1).

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