Epidemiological, clinical, and laboratory features of brucellar meningitis: A study of 39 cases

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Abstract

Background: Although one of the most serious mononuclear meningitis is tuberculosis and the most prevalent one is viral meningitis, but the most treatable one is brucellar meningitis.

Methods: In this cross sectional study we considered documents of 39 patients who have been diagnosed during 1988-2005. Patients were confirmed using positive agglutination tests of serum, spinal fluid or positive culture of blood, bone marrow and spinal fluid tests.

Results: 64% of patients were female and 36% were male with average age of 26.9 years old. Patients major complain were: Headache (95%), vomiting (77%), fatigue (39%), myalgia (15%), cough (15%), movement disorders (15%), arthralgia (13%). Main clinical findings were: nuchal rigidity (74%), splenomegaly (49%), kernig’s (41%), and brudzinski’s signs (39%). Wright agglutination test with titer of 1:160 to 1:1280 in all patients’ serums, CSF Wright test or coombs wright test in half of them and blood, bone marrow and CFS culture in %60 were positive.

Conclusion: Epidemiological aspects as like as age, sex and seasonal distributions were somehow like systemic brucellosis. Sex distribution of patients was different from most other studies and seasonal distribution of the disease did not follow the seasonal distribution of systemic brucellosis but clinical or laboratory findings were so similar to Turkey and other studies in Iran. The definite response, without complication and recurrence, was achieved with co-trimoxazole plus rifampin and sometimes adding streptomycin, for 45–60 days which attracts more attention than most other studies and we recommend this regimen as a choice therapy.

Keywords: Brucellosis, Meningitis, Neurobrucellosis, Wright test, Kermanshah

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