

Brucella Meningitis

A brucella bacterium is a coccobacillus genus of Gram-negative, small, non-spore and the species that infect humans, and include: *Brucella abortus*, *B. melitensis*, *B. suis*, and in rare cases *B. canis* (1). Brucellosis is a zoonotic disease in domestic and wild animals with humans as its accidental hosts (1). According to the WHO's report in 2003, most cases of brucellosis infection were from Syria with (23,297 people), Iran (17,765) and Turkey (14,435) (2). In animals causes miscarriage, reduced milk production, meat and wool and that human can be infected in contact with tissue, blood, urine, vaginal secretions during miscarriage of animals, drinking non-boiled milk and products of contaminated milk (1).

It is often an opportunistic disease in farmers, ranchers, veterinarians, butchers, meat inspectors and laboratory personnel. In particular, there is no evidence on transmission of the disease from person to person. The incubation period of the disease is varied from 1-4 weeks but generally its symptoms are appeared during 3-4 weeks after contacting of human with infected animal (1). Brucellosis is a systemic infectious disease that can affect any organ in the body. The disease outbreak can be acute, subacute or chronic. One of the complication of the brucellosis considered to be meningitis, which may directly attack the nervous system in 5% of the patients (3). In general chronic disease type may attack intracellular microorganisms or destroy Myelin membranes of nerve cells. The invasion may lead to meningitis, encephalitis, meningoencephalitis, meningovascular and Parenchymal dysfunction, psychosis, peripheral neuropathy and radiculopathy (4). The disease has been reported in Kermanshah (9), Azarbajejan (10), Hamedan (11) and Tehran (12) so far (2). In case of non

treatment of the patients 2-3% death will occur (3).

According to our study one patient with animal husbandry job referred to hospital had fever and acute headache with vital signs of respiration 16, pulse 75 and blood pressure 130.90 mm Hg. After the taking history the serology test results of Wright 1.160 and 2ME1.80.

Considering the patient symptoms, spinal fluid function was performed with glucose mg.dl 60, protein mg.dl 34, WBC 100, RBC 0, neutrophils mg.dl 10 and lymphocytes mg.dl 90. The Wright level was positive with 1.120 and then the patient was treated with rifampicin-doxycycline and cotrimoxazole for 12 weeks. It is therefore necessary for all patients who are likely to have neurobrucellosis to be surveyed for microbiologic tests, blood and cerebrospinal fluid examination and the presence or absence of cerebral lesions by CT-scan.

References

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