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LETTER TO THE EDITOR

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A refugee patient with meningococcal meningitis type B

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To the editors

We read the article by Dretler et al.[1] regarding meningococcal disease with great interest. In this review it is stated that environmental risk factors for meningococcal transmission and disease include winter months in temperate climates, tobacco exposure, low humidity, the dry, dust exposure and overcrowding. Also in this report populations at increased risk were defined as persons living in close quarters such as military recruits or college students housed in dorms, men who have sex with men (MSM), microbiologists who regularly work with meningococcal isolates, individuals receiving the complement inhibitor eculizumab, and travelers to the meningitis belt in sub-Saharan Africa or to the Hajj or Umrah in Saudi Arabia. According to our idea after war epidemiology has changed a little bit. Due to overcrowding of the refugees, they could also be included in risk groups. To support this opinion we report a 2 year old Turkoman refugee boy living in Turkey admitting with fever and vomitting diagnosed as meningococcal meningitis type B. The Turkoman boy, was admitted with fever and vomitting of 2 days history. At the admittance petechia more prominent in the upper extremities unnoticed by her mother, was present so with a probable diagnosis of meningococcal meningitis lumbar punction was done and first dose of ceftriaxone was applied. In the examination of central system fluid (CSF) amorph polymorphonuclear leucocytes in Giemsa stain and Gram negative cocci in Gram stain was present. Vancomycine was added to therapy. Laboratory study yielded leukocytosis (29800/μL [N: 3,4–10,8 $\times$ 10^3/μL]), elevated C reactive protein (14 mg/dL [N: 0–0,5]). Laboratory study of CSF showed CSF glucose as 28 mg/dL (N: 40–70), CSF protein as 242 mg/dL (N: 15–45) and blood glucose level was 101 mg/dL. Polymerase chain reaction study of CSF yielded *Neisseria meningitidis* type B. Culture of CSF yielded *Neisseria meningitidis* whereas blood and urine cultures were negative. Due to antibiotic sensitivity results vamcomycine was dismissed and patient was cured after 10 days of ceftriaxone therapy.

Approximately 60% of meningococcal disease in US children under 5 years is caused by serogroup B[1]. Our experience of meningococcal disease is also similar that it also has a burden in Turkey.[2] The two serogroup B OMV vaccines are now approved and in many countries but not yet in Turkey. We would like to emphasize the importance of implementing new strategies for health care of refugees in the light of our case report. Also national surveillance studies are important to view changing seroepidemiology in special circumstances such as war.

Disclosure of potential conflicts of interest

No potential conflicts of interest were disclosed.

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