BMH MEDICAL JOURNAL

ISSN 2348–392X

BMH Medical Journal 2014;1(2):30-32 **Case Report**

Eosinophilic Meningitis in a Middle Aged Man After Consumption of Camel Meat

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Abstract

We report the case of a middle aged male who presented with headache and vomiting and later diagnosed to have eosinophilic meningitis as a complication after consumption of camel meat.

Key Words: Eosinophilic meningitis, monitor lizard, camel

Introduction

Eosinophilic meningitis (EOM) is defined as the presence of more than 10 eosinophils/mm3 in the cerebrospinal fluid (CSF), and/or eosinophils accounting for more than 10 percent of CSF leukocytes [1]. Reliable detection of eosinophils in the CSF requires examination of centrifuged cell preparations stained with Wright's, Giemsa, or other appropriate stains. Eosinophils are found in the CSF in a limited number of diseases, including certain parasitic diseases and coccidioidal meningitis [2]. The etiologies of eosinophilic meningitis will be reviewed here, with emphasis on the parasitic causes of this condition.

Case Report

49 year old male presented to us with headache, fever and vomiting since 3 days. No h/o loss of consciousness, seizures, limb weakness. No significant medical illness in the past. He was employed at Dubai and had a habit of having camel meat, during festivities and other occasions regularly. There is no h/o consumption of drugs like Ibuprofen, Ciprofloxacin. No h/o Diabetes, Hypertension, Tuberculosis, sexually transmitted diseases or arthritis.

On physical examination he was conscious and oriented. Febrile, There is no jaundice, pallor or edema. BP and pulse were normal. Neurologically he had neck stiffness as the only clinical sign. Other systems were normal.

Investigations revealed total count of 12600/mm3, ESR:30mm/1st hr, E:08%, AEC:1008, RBS, LFT, S. Electrolytes, RFT were normal. ECG, Chest X-ray, USG Abdomen were normal. CT Brain

was normal. Peripheral blood smear showed neutrophilia and no parasites. CSF study was done. CSF was turbid with increased pressure, CSF protein was 236mg, Sugar : 56mg (Blood Sugar : 117mg%). Polymorphs : 5%, Lymphocytes : 50%, Eosinophils : 45%, CSF WBC: 4250. RBC:15cells. CSF AEC : 1050cells, ADA : 10, no xanthochromia. CSF culture and India Ink were negative. Blood LDH : 180unit/ltr, ANA, RA Factor : Negative, Mantoux test, HIV, VDRL : Negative, Stool RE : Normal.

Treatment Course

Third generation cephalosporin as twice daily dose for ten days along with intravenous Dexamethasone TID and tapered over 10 days and later switched over to oral predniosolone 60mg once daily. Albendazole 400mg twice daily for 2 weeks was also given [3,4].

Discussion

Eosinophilic meningitis is not a disease, it is a manifestation which is seen in diseases like parasitic infections, tuberculous meningitis, cryptococcal meningitis, syphilitic meningitis, carcinomatous meningitis, rheumatoid arthritis and HIV infection [5,7].

In this article we are highlighting on the parasitic cause of eosinophilic meningitis. Parasites like Angiostrongylous Cantonensis, Gnathostoma spinigerum, Schistosomiasis, Cysticercosis, Toxocariasis, Baylisascariasis, paragonimiasis are the most common parasites causing eosinophilic meningitis. Less common parasites causing EOM are Hydatidosis, Filiarisis, Strongyloidiasis and Trichinelosis [3,7]. Apart from parasitic infections next most commonest cause is rheumatoid arthritis. The risk factor for EOM due to parasitic cause is bare foot walking, eating vegetables and fruits having snail slimy tract. It can also occur after consuming raw mollusks, [1,2] uncooked camel meat and eating raw flesh and blood of monitor lizard which is commonly practiced southern parts of Kerala, as people think that raw flesh and blood of Igauna or monitor lizard gives them strength [3]. Camel meat harbours parasites, and eating uncooked camel meat in the form of salads can end up in Eosinophilic meningitis.

Diagnosis is from history, clinical presentation and presence of neck rigidity. History of consumption of raw mollusk,monitor lizard and presence of eosinophils in CSF[3,6] Neuroimaging and recovery of parasites from CSF (rare), intrathecal intraglobulin assay and immunological methods - reactivity to 31-KDa component in western blot (WB), ELISA - PCR. Treatment includes repeated spinal taps, 2 weeks course of Albendazole (10-15mg/Kg) and 2 weeks course of steroids (60mg/day) [3,4].

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