

Neurobrucellosis - A Case Report

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ABSTRACT

Background: Brucellosis is rare in A.P and high degree of suspicion is necessary to identify this disease.

Patient: A 23 years old male farmer, presented with headache, vomiting, and paresthesias. Severe occipital headache. On physical exam illness, weakness, fever, wet skin, soft spleenomegaly were detected. He had positive Wright test (1/1250) and lymphocytic pleocytosis in CSF. Three drug regimen and steroid (1st month) were administered for 2 months and he responded well to this therapy.

Conclusion: Our patient showed progressive improvement in neurological manifestations under steroid and 3 antibiotic regimen treatment over a period of 2 months which along with history of goat milk consumption confirmed our diagnosis of Neurobrucellosis.

Keywords: Neurobrucellosis.

Introduction

Brucellosis is a common zoonotic and an important occupational disease in our country¹. Animals are most exclusively source of infection for people. The major reservoirs include goats and sheep (*B.melitensis*), cattle (*B.abortus*), swine (*B.suis*), and dogs (*B.canis*). Infection occurs through consumption of infected raw milk and their products or raw meat also. It is transmitted by direct contact with infected animals or abortive material. It presents as acute, subacute and chronic courses by involving different systems with varied manifestations. CNS involvement is important clinically and occurs in 2-12% of cases^{2,3,4}. Brucellosis and neurobrucellosis are more common in second to fourth decades⁵. Involvement of entire central and peripheral nervous system and also psychologic disturbances can occur. Every patient with neurologic manifestations in endemic areas should be ruled out for brucellosis.

For susceptible cases, travel history, occupation, and similar symptoms in other family members should be sought. Isolation of organism from blood, cerebrospinal fluid (CSF), and bone marrow; and serum antibody detection could establish the diagnosis^{2,5}.

CASE REPORT

A 23 years old farmer was admitted because of illness, weakness and paresthesias. Disease had begun 1 month ago by weakness, fever, chills and orchitis which regressed after he received 1 week treatment. One month later, orchitis resolved but severe headache in occipital region, blurred vision, epigastric pain and vomiting were added. His past medical history was unremarkable. He is a shepherd by occupation. History of regular contact with sheep and consumption of its milk is present. His brother had brucellosis one year ago. His sheep experienced abortion and death. On physical examination he was conscious, very ill, afebrile with soft spleenomegaly epigastric tenderness, bilateral papillary edema with direct and indirect light reflex, visual field is normal, visual acuity of 6/10, no meningeal and cerebellar signs. Paraclinical findings included normal complete blood count, urine analysis, chest-x ray,

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Diagnosis: Helicobacter Pylori gastritis

Discussion:

Helicobacter Pylori frequently colonises the gastric mucosa usually resulting in long term infection and chronic gastritis. The association between H.pylori infection and chronic gastritis was first noted by Warren and Marshall^[1]. Clinically the symptoms include epigastric pain, a bloated feeling, nausea and occasional vomitings with mild constitutional symptoms.

H.Pylori is a curved or spiral shaped bacterium 2-4 micrometres in length with sheathed flagella at one end and occasionally at both ends^[1]. The organisms are found consistently in the antrum but many infected patients have pangastritis with organisms and inflammation in both antrum and corpus^[2].

The principal and most obvious histological feature of H.Pylori gastritis is infiltration of the lamina propria of the superficial mucosa by plasma cells, lymphocytes and small number of eosinophils and neutrophils^[3].

H.Pylori are curved or s-shaped bacilli, recognised on routine H&E staining. They are found with in surface mucus layer and are easy to find in gastric pits. Special stains are necessary when screening biopsies for H.Pylori. A modified Giemsa stain is simple and cheap and is satisfactory for routine

use. The Warthin starry silver stain also gives satisfactory results^[4].

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