Seropositivity for Brucellosis in Veterinarians

Sir,

We tested veterinarians and their assistants working at a bull-rearing center and frozen semen facility for Brucella antibodies.

Forty persons working at the center were examined physically. Out of these, 9 were veterinarians while the remaining 31 were their assistants. Most of the personnel (25) were asymptomatic. Nine had joint pains (involving knee, interphalangial joints, etc.). Four had fever.

None of them gave history of consumption of raw milk or milk products. All the veterinarians had worked earlier in different veterinary dispensaries and hospitals, and conducted deliveries. Use of gloves and barrier methods was inconsistent among all the personnel involved.

Brucella antibodies were tested by Rose Bengal Plate Test (RBPT) as a screening test for B. abortus as well as for B. melitensis (Veterinary Laboratories Agency, Addlestone, UK). RBPT was negative in all personnel.

PANBIO Brucella IgG and IgM Enzyme Linked Immunosorbant Assay (ELISAs) were performed (PANBIO, Windsor, Brisbane, Australia). Seven out of 40 (17.5%) had anti-Brucella antibodies; IgG was raised in five persons whereas anti-Brucella IgG plus IgM was raised in two. Out of these seven, five were veterinarians.

In veterinarians as a separate entity, Indian workers have reported high seropositivity (14.63%,[1] 25.89%[2]). However, the figures are lower than those found in this study. Five out of nine (55.5%) veterinarians in our study tested positive for Brucella antibodies. Such high seropositivity (46.42%) in veterinarians has been reported from Turkey.[3] In the absence of history of consuming unpasteurized dairy products, this high rate can be probably explained by direct exposure to Brucella-infected animals.

In review articles, RBPT is shown to be useful as a screening test and its sensitivity is reported to be as high as >99% but specificity low.[4] This was in comparison with tests such as Stadard tube agglutination test (SAT), SAT with 2-mercaptoethanol (2ME), and so on. However, these studies have not compared RBPT with ELISA.

In the Turkish study,[3] ELISA detected more seropositives than RBPT. It is reported that in patients with a long history of disease, brucellosis cannot be ruled out based on a negative Rose Bengal test.[5] We may add that in persons with prolonged exposure to animals, brucellosis cannot be ruled out based on negative a Rose Bengal test. Our findings indicate that since ELISA is more sensitive, it should be used for serodiagnosis of brucellosis.

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Niranjan B Patil, Ajit S Damle1, Jayashree B Bhakare1, Jyoti A Iravane1, Mukta N Khaparkhuntikar1, Pradyuta S Gajbhiye1

Department of Microbiology, Reliance Hospital Management Services, Sir Hurkishonndas Nurrotamdas Hospital and Research Centre, Mumbai, 1Department of Microbiology, Government Medical College, Aurangabad, Maharashtra, India

Address for correspondence:
Dr. Ajit S Damle, E-mail: ajit_281@yahoo.co.in

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Intractable Hiccups in an Elderly Diabetic: An Unusual Presentation

Sir,

India is considered to be the diabetic capital of the world. [1] Hiccups persisting for more than one week in a diabetic patient are not that common and are difficult to treat. A 50-year-old male chronic tobacco user with uncontrolled diabetes, hypertension, and diabetic foot presented with hiccups for the last 10 days. His left leg was amputated about 22 years back in an accident; it was at this time that he was also diagnosed to be diabetic. His blood investigations including kidney functions were normal except high blood sugars. He did not respond to any of our symptomatic treatment for hiccups till he expectorated a round worm [Figure 1] and got relieved. Although the exact mechanism by which worms cause hiccups is not mentioned in literature, it may be because of the irritation of the vagus or phrenic nerve or gastroesophageal reflux. [2-4]

This case highlights important epidemiological aspects of our country along with an equally interesting clinical presentation. Here is the phenomenon of “triple whammy,” that is a non-communicable disease like diabetes occurring at a comparatively young age of 28 with its attendant complication like diabetic foot in an individual who already is a below knee amputee. Despite suffering from these complications of diabetes he continues to smoke and suffers with a communicable disease like Ascariasis. Ascariasis may remain asymptomatic for a long period, [5] only to be diagnosed when an individual either vomits out or coughs out or passess the adult worms in stool. But in our case it produced hiccups and the diagnosis could only be made once the patient vomited it and hiccups stopped completely with the expulsion of the worm. Present case also tells us the importance of inspection at the bed side, a round worm in vomitus giving clue to the intractable hiccup.

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Ramesh Aggarwal, Shridhar Dwivedi, Anupam Dey, Shamim Ullah Khan, Meenakshi Aggarwal

Department of Medicine/Preventive Cardiology, Hamdard Institute of Medical Sciences and Research and HAH Centenary Hospital, Jamia Hamdard, Hamdard University, New Delhi,

Department of Microbiology, CNBC and Associated Maulana Azad Medical College, New Delhi, India

Address for correspondence: Dr. Ramesh Aggarwal, E‑mail: rameshlhmc@gmail.com

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