Dear Editor,

In this study we used HIV antibody assays (ELISA and immunoblot) that can detect IgM antibodies. The immunoblot detects the IgM antibody as the conjugate used in the assay was peroxidase-labeled goat anti-human IgG against heavy and light chains. A frequency of 0.92% HIV antibody positive status was observed among individuals presenting with dengue like illness. During the same period an HIV frequency of 2.22-1.38% was seen in a hospital-based population. In a recent community based study conducted in Vellore district and in the urban wards of Vellore town 1512 serum samples were tested from subjects residing in rural areas and 1358 samples from urban areas collected during 1999-2000 for HIV antibodies. The overall HIV prevalence was 1% with a lower seropositivity among rural samples (0.66%) than urban (1.4%).

Though the seroconversion illness can present as dengue-like illness we could not find any increase in the frequency of HIV infection. Among the dengue IgM positive samples, two showed indeterminate results. Those two patients may have been in the seroconversion period as both showed reactivity to P24 antibody by immunoblot. It is known that some individuals who belong to HIV risk groups including sexually promiscuous individuals.

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For dengue IgM antibody. The immunoblot confirmed two of these samples as HIV negative and the remaining two as indeterminate. The data is shown in the Table.

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To predict the outcome of urine cultures, several screening methods have been developed. In photometric screening, diluted urine specimen is added to the broth in microplate well and incubated; if the specimen contains at least 10^5 bacteria/mL, optical density (OD) in the well increases significantly within five hours. The aim of this study was to verify this method using a kinetic microplate reader.

Four hundred thirty midstream urine specimens were tested by the standard culture method. Specimens with counts ≥ 10^5 cfu/mL were considered positive. The specimens were also evaluated using a photometric screening. Urine specimens (100 µL) were inoculated in to 100 µL of brain heart infusion (Oxoid, Basingstoke, UK) enriched with 8% of concentrated tissue culture medium E-199 (Sevapharma Prague, Czech Rep) in microtitre wells. The plate was placed on a photometer (MRX HD; Dynex Laboratories, Chantilly, VA). The temperature of the microplate chamber was maintained at 36°C. The optical density (OD) of inoculated wells was measured every ten minutes at a wavelength of 420 nm. Wells with an OD increase of ≥7% in four hours were considered as positive. Curves of turbidity increase were also received and those that contained an exponential segment were considered positive. The quantitative culture test and photometric screening thus resulted in three logical values: significant/ insignificant bacteriuria; presence/ absence of 7% increase in OD in four hours; and presence/ absence of an exponential segment in curve. Relation among those logical values was expressed as sensitivity and specificity, positive and negative predictive values of the screening.

References


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Received: 31-03-06
Accepted: 06-03-07

A Photometric Screening for Significant Bacteriuria

To predict the outcome of urine cultures, several screening methods have been developed. In photometric screening, diluted urine specimen is added to the broth in microplate well and incubated; if the specimen contains at least 10^5 bacteria/mL, optical density (OD) in the well increases significantly within five hours. The aim of this study was to verify this method using a kinetic microplate reader.

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The results are shown in the Table. The exponential character of turbidity increase was less sensitive yet a more specific screening criterion, thus it is suitable for preliminary confirmation of significant bacteriuria. The non-specified turbidity increase estimation has a high negative predictive value and is suitable (just like the biochemical screening) for preliminary exclusion of significant bacteriuria. Using a microwell plate and a photometer with a kinetic programme, the photometric method can be used for the reliable, rapid and inexpensive screening of bacteriuria.

**References**


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Received: 18-04-06
Accepted: 25-03-07

**Investigation for Background Prevalence of *Brucella* Agglutinins Among Blood Donors**

Dear Editor,

Human brucellosis varies from an acute febrile illness to a chronic, low-grade illness defined disease. It is a systemic disease, characterised by paucity of signs but accompanied with a myriad of non-specific symptoms such as fever, nocturnal sweating, malaise, fatigue, myalgia and backache. Patients with brucellosis may have been ill for many weeks or months before a diagnosis of brucellosis is considered. Many times Widal false positive reactions occur in patients with brucellosis giving a wrong diagnosis of typhoid fever. The disease has a worldwide distribution with higher prevalence in Middle East, Mexico, Central and South America and the Indian subcontinent. There is a paucity of literature on human brucellosis in India due to the highly infectious nature of the organism. In the absence of an isolate, serological investigation of the patient is of paramount importance for diagnosis of the disease and the future management of the patient. But before we do so, it is important to know the background prevalence of *Brucella* agglutinins. This study was carried out to investigate the background prevalence of *Brucella* agglutinins in blood donor population in and around Chandigarh.

A total of 292 serum samples obtained from blood donors attending the Blood Transfusion Medicine of Postgraduate Institute of Medical Research, Chandigarh were investigated for *Brucella* antibodies. The age range of the subjects was 18 to 55 years with a male:female ratio of 1.8:1.

*Brucella* antigen along with control positive and negative sera were procured from Indian Veterinary Research Institute (IVRI), Izatnagar, Uttar Pradesh. The sera were checked for *Brucella* agglutinins both by the slide and the serum