

LETTER TO THE EDITOR

APROPOS “EVALUATION OF DENGUE NS1 ANTIGEN DETECTION FOR DIAGNOSIS IN PUBLIC HEALTH LABORATORIES, SÃO PAULO STATE, 2009”

Delhi, December 26, 2011

Dear Sir

We compliment investigators in Public Health laboratories in the São Paulo State, for their meticulous evaluation of the importance of dengue NS1 antigen detection for monitoring the introduction and the spread of dengue virus (DENV) serotypes³. Apart from rapid detection of DENV NS1 antigen, simultaneous detection of DENV-IgM, -IgG and enumeration of circulating platelets would be useful for the diagnosis of several additional cases and for the prompt detection of those who have had severe thrombocytopenia.

One-tier testing would be beneficial in patients with a primary or secondary DENV with severe thrombocytopenia. They could be offered platelet infusions straightaway. Testing for DENV NS1, IgM and IgG rather than IgM alone was advantageous in the 175 suspected cases of DENV during the 2010 outbreak of DENV in the Indian capital, New Delhi. There were 86 NS1-positive cases and 89 NS1-negatives. NS1 positives included 57 that were negative for IgM and four which were only positive for IgG. Of these 61 patients there were 57 with a primary infection and secondary infection which would otherwise have been labeled as negative¹. Furthermore, there was a great variation in platelet counts during different stages of the disease evolution. Platelet counts were lower in those positive for NS1 (and IgM and/or IgG positives) than in those who were NS1 negative².

Surely, concurrent search for DENV NS1, IgM, IgG and platelet enumeration would be useful in Public Health laboratories in the São Paulo State³. Moreover, the immunochromatographic assay for DENV NS1, IgM and IgG would emerge as the ideal option in the majority of non-academic, non-research health care centers. Facilities for sophisticated tests like ELISA, cell culture or molecular studies are not available in many laboratories, not only in remote locations, but also in big cities in developing countries⁴.

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