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of a Microbiology Paper Beig FK, Ahmad F, Ekram M, Shukla I. Typhidot M and Diazo test vis-a-vis blood culture and Widal test in the early diagnosis of typhoid fever in children in a resource poor setting. *Braz J Infect Dis*.

[Internet] 2010 Dec [cited 2011 March 24]; 14(6): 589-93: Available from <http://www.ncbi.nlm.nih.gov/pubmed/21340299> Typhoid fever has

emerged as one of the major public health challenges all over the world.

Estimates have indicated that approximately 6, 00, 000 deaths world wide are attributable to typhoid. Most of these occur in developing countries. More

often than not, the diagnosis of typhoid is made on clinical grounds and

presumptive management is initiated leading to delayed diagnosis,

emergence of drug resistance and missing of other clinical diagnosis that is

mistaken for typhoid fever. The gold standard for diagnosing typhoid fever is

isolation of organism through blood culture. But lack of expertise and

equipment for this test makes it unusable in a peripheral setting. Widal test

is also useful, but is of no value in endemic areas. Currently, this test is

regarded as non-specific and inaccurate. Because of these limitations of the

popular tests, several assays and serological tests have been developed but

have not been found to be optimal. Thus, the need of the hour with regard to

typhoid testing is a test that is not only simple, but also reliable and carried

out in small laboratories in the peripheries. Two such tests which merit

importance are typhidot M and Diazo tests. In this study, Beige et al

prospectively evaluated typhidot M and Diazo tests vis-a-vis blood culture

and Widal test in children. In this prospective study, children aged 6 months

to 12 years with fever of more than four days duration and with clinical

suspicion of fever were enrolled. Those with other suspected diagnosis were

used as controls. Validation of typhidot M and Diazo tests were done against

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blood culture and then all the four tests were evaluated among patients who presented in the first week of illness. The results of the study revealed that blood culture was positive in only 27.3 percent cases, which means that this percentage of children had definite diagnosis of typhoid. Among these children with established diagnosis of typhoid, highest sensitivity, specificity, NPV and PPV of 90-100 percent was seen with typhidot M test followed by Diazo test. The authors discussed that the culture positivity in their tests was within the range as demonstrated in other tests. One of the reasons for a somewhat low percentage, according to the authors was because of rampant use of antibiotics by private practitioners. The authors opined that since blood culture is the foolproof method for the diagnosis of typhoid fever and hence a substitute has to be validated against it. Also, the feasibility of the test had to be taken into account in view of the fact that the idea of the study was to find the utility of various available tests as applied to various levels of health care, especially the resource poor settings. The authors concluded that both Typhidot M and Diazo are good screening tests for the diagnosis of typhoid fever even in small laboratories. Of these two, Typhidot M was superior to Diazo in terms of sensitivity and specificity, but Diazo has other advantages like easy to perform and economy.