

anti-rickettsial antibodies, and that different *Proteus* O antigens reacted with different *Rickettsia* species.

Scrub typhus (*Orientia tsutsugamushi*) reacts with *P. mirabilis* OXK, while rickettsia group rickettsiae (*Rickettsia prowazekii*, *Rickettsia typhi*) reacts with *P. vulgaris* OX19.

The rickettsiae (*R. rickettsii*, *R. africae*, *R. japonica*, etc.) spotted fever group reacts with *P. vulgaris* OX2 and OX19 to variable degrees, depending on the species.

The Weil–Felix test has low sensitivity and specificity, according to a recent study, with overall sensitivity as low as 33% and specificity as low as 46%.

Similar findings have been seen in other investigations. As a result, newer serological procedures, such as the gold standard indirect immunofluorescence antibody (IFA) testing, have essentially overtaken it. However, in resource-constrained contexts, it remains a vital tool for diagnosing and identifying public health issues such as epidemic typhus epidemics.

Q: What is the purpose of the slide agglutination technique and the tube method

Slide agglutination technique is for the primary screening if positive or negative and the tube method is for the confirmatory.

Q: Briefly describe other serologic test used in diagnosis of typhoid fever.

IPA- antigen attached to slide and then reacted with antibody. An anti immunoglobulin with an enzyme tag is added. PCR - amplification of specific genes for each group.