Epidemiology of *Tropheryma whipplei*

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*Tropheryma whipplei*, which causes Whipple's disease (WD), is detected with variable prevalence in human stool and saliva. We investigate the epidemiological factors which influence the bacterium natural history. For this purpose, molecular and/or serological studies was performed in entire population of 2 villages in Senegal (Dielmo and Ndiop), in homeless people and in family in Marseille-France. *T. whipplei* was identified in 31.2% of the stool (139/446) and 3.5% of saliva (13/370) obtained from healthy subjects in Senegal. The carriage in the stool was significantly (p<10^-3) higher in children who were between 0 and 4 years old (60/80, 75%). In homeless peoples the prevalence of *T. whipplei* in stools was 12.9% (21/162) and 37.5% of stools (24/64) and 10% of saliva (7/70) in relatives of patients with Whipple disease or chronic carriers. Regarding findings from phylogenetic analysis, we identified in Senegal 22 genotypes, 16 of which were new. Among these, specific and epidemic genotypes were identifying. Overall, the same circulating genotype was common all population. Important seroprevalence and seroconversion was detected in all population. Our findings show that T. whipplei is a common and contagious bacterium that is contracted early in childhood. Epidemic genotypes associated with absence of the bacterium in water, arthropods vector; almost no presence (<1%) in domestic animals and dust suggest a human transmission of *T whipplei*.

Biography

Alpha Kabinet Keita obtained his medical degree at the Faculty of Medicine of the Gamal Abdel Nasser University in Guinea-Conakry in 2007, completed Master degree in 2010 and PhD in infectious diseases and Microbiology in 2013 at Aix-Marseille University in France. Currently, he is Post doctoral Research Scientist at Institut de Recherche pour le Développement (IRD) in Unité de Recherche sur les Maladies Infectieuses et Tropicales Emergentes (URMITE) at Dakar (Senegal). He has published 09 scientific papers in reputed journals and his research interests include epidemiology of infectious diseases, *Tropheryma whipplei* agent of Whipple's disease, malaria and non malaria fever.

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