

Prevalence of *Tropheryma whipplei* DNA in patients with various gastrointestinal diseases and in healthy controls.

Background: Little is known about the epidemiology of *Tropheryma whipplei* and its prevalence in people without clinical signs of Whipple's disease.

Patients and Methods: We screened 239 patients with various gastrointestinal diseases for *T. whipplei* DNA and compared them with 215 healthy controls in order to check whether *T. whipplei* might be a risk factor for common gastrointestinal problems or diseases. We detected the 16S rDNA of *T. whipplei* in salivary and stool samples using a specific seminested PCR.

Results: The prevalence of *T. whipplei* DNA in patients and in controls was 4.2% (95% CI 2.0-7.6%) and 7.0% (95% CI 4.0-11.3%), respectively. None of the different gastrointestinal diseases was associated with a higher rate of PCR-positive tests, except for the group of patients with reflux syndrome. Five out of 43 patients with reflux were found to be positive, with all five being positive in the salivary sample. This is in contrast to our findings in carriers without reflux with mainly positive stool samples ($p < 0.01$).

Conclusion: We conclude that the asymptomatic carrier state of *T. whipplei* indeed exists and that it is much more frequent than the rare Whipple's disease. The higher prevalence of *T. whipplei* DNA in the saliva of patients with reflux syndrome suggests that the stomach might be the habitat of the organism.