

Asymptomatic campylobacteriosis as a risk factor for developing acute neurological syndromes in Veracruz, Mexico.

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Background

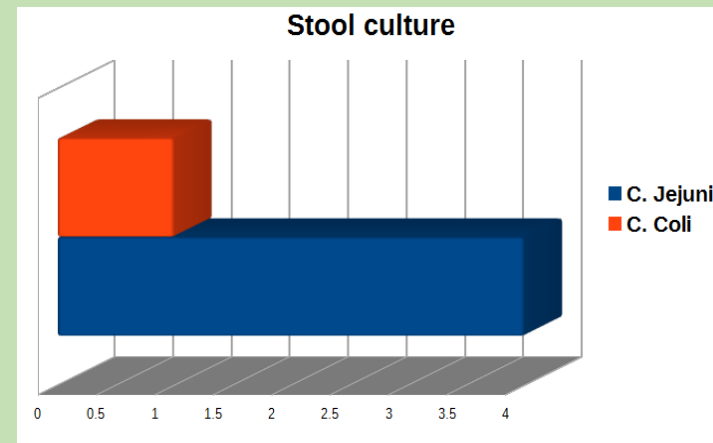
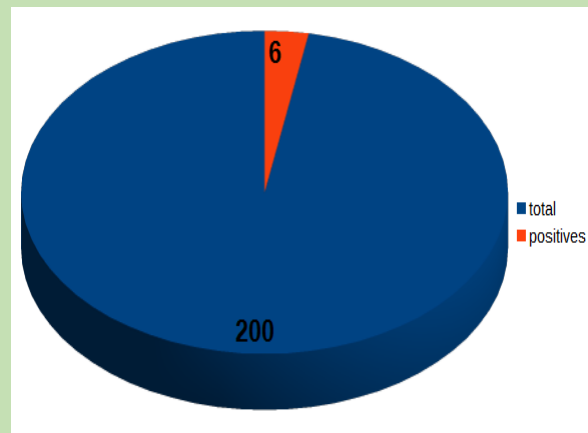
Campylobacter infection is the main cause of diarrheal disease, however it is recognized as a risk factor for developing Guillain Barré syndrome, which has been previously corroborated in our population after analyzing the incidence of the syndrome during arboviral outbreaks of 2016-2018, resulting that 75% of the cases were due to infection by Campylobacter. Furthermore, of these patients, 83% did not present gastrointestinal symptoms, constituting an asymptomatic campylobacteriosis at the intestinal level, and Guillain Barré syndrome could be its primary manifestation. Reason why the need arose to look in this population for cases of asymptomatic campylobacteriosis.

Methods

Analytical, observational and prospective study. 200 healthy and asymptomatic individuals over 18 years of age were selected in the Veracruz Norte branch of the Mexican Institute of Social Security during September to December 2019, who were asked for a stool sample, which was subjected to a study to search for Campylobacter through a chromatographic immunoassay test for the qualitative detection of said bacteria (Certest). Patients who were positive to the Certest test underwent stool culture (Campy-bap) in order to typify the identified Campylobacter species.

Table 1. Characteristics of the study population.

	Female	Male	p
n=200	104	96	
Average age	47.7	44.8	0.279
Comorbidities			
Diabetes Mellitus 2	5	6	1.000
Dyslipidemia	1	0	1.000
Arterial Hypertension	10	0	0.002
Previous Gastroenteritis	3	3	1.000
Previous Arboviruses	14	8	0.491
Campylobacteriosis			
Identification of <i>Campylobacter</i> by Certest	4	2	0.684
Stool culture positive for <i>Campylobacter jejuni</i>	4	0	0.038



Results

In the search for Campylobacter, the Certest was positive in 6 (3.0%); In 5 (83.3%) subjects some variety of Campylobacter could be isolated by stool culture, in 4 (66.7%) Campylobacter Jejuni was isolated and in 1 (16.7%) Campylobacter Coli was isolated.

The positive result of Certest was similar between women and men [4 (3.8%) women vs 2 (2.1%) men ;p=0.684].

However, in relation to the culture, there was the percentage of women in whom the culture was positive for Campylobacter Jejuni was statistically significant [4 (100%) VS 0 (0.0%); p = 0.038].

Conclusion

Asymptomatic positive cases of Campylobacter were identified in this study population in 3%, mainly isolating Campylobacter jejuni, which leads to the conclusion that there are cases of asymptomatic Campylobacteriosis that could act as a risk factor for the development of acute neurological syndromes related to the presence of the bacteria