Prevalence of *Campylobacter jejuni* in Diarrhea samples in Gorgan , East north of Iran

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Abstract

Background and Objectives: Diarrhea is one of the most common diseases in the world. *Campylobacter jejuni* is one of the prevalent agents of bacterial diarrhea in most of developing countries. It is usually ignored in routine laboratory test in our country, because it has a difficult investigation method. This article aims to determine the prevalence of Campylobacter jejuni, in diarrhea samples in Gorgan City (East north of Iran) by PCR Method.

Material and Methods: This descriptive study was performed on 455 diarrheal samples during one year (2005-06).255 out of them were cultured on Preston media (Himedia co.) on 42°c. DNA Extracted by phenol cholorophorm method was directly carried out on stool samples.16srDNA; hipo and asp primers for detection of Campylobacter genus, C.jejuni and C.coli species were used, respectively. In addition, universal primer of 16srDNA was used for control of PCR method.

Results: no sample was positive for *Campylobacter* in culture .only three samples were positive for *Campylobacter* genus and *C.jejuni* specific primer but none of them were positive for *C.coli* .99 samples were positive by universal primer of *16srDNA*.

Conclusion: The results indicate that *C*.jejuni isn't a prevalent agent in diarrhea in our region.

Key words: Campylobacter jejuni -Gorgan- Diarrhea.