

## Identification of Campylobacter Infection in The Patients with Diarrhea by PCR

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**Background & Objectives:** Campylobacter is a gram-negative, spiral and microaerophilic bacteria that it is a common diarrhea in humans cause of acute disease. The aim of this study was to identification of campylobacter infection in the patients with diarrhea by PCR.

**Methods:** Stool samples from 117 patients with diarrhea were collected and dissolved in 500μl PBS and 100μl added to thioglycollate medium was incubated over night under microaerophilic environment at 42 °C. Then 100μl of samples were cultured in blood free campylobacter agar base medium and were incubated at 42°C under microaerophilic conditions for 48h. *C.jejuni* and *C.coli* colonies were tested for biochemical characters, Gram staining, oxidase, cataalase and hippurate hydrolysis. DNA was extracted from pure bacterial cultures. The *hipO* and *asp* genes were used for identification of *C.jejuni* and *C.coli* respectively. Genes amplified by PCR.

**Results:** *C.jejuni* was isolated from stool samples of 9 patients (7.69% ) by PCR and *C.coli* was isolated from stool samples of 4 patients by PCR (3.41% ).

**Conclusion:** The findings suggest that PCR is a rapid diagnostic tool for detecting *C.jejuni* and *C.coli* infection in diarrhea patients.

**Keywords:** Campylobacter; Diarrhoeal Stools; PCR

