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**Title: Comparative Efficacy of Two Selective Media for Isolating Campylobacter jejuni/coli**

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**Abstract:**

Background and Objectives: Campylobacter jejuni and campylobacter coli has been recognized as a major cause of gastroenteritis in humans. C.jejuni /coli grow satisfactorily on basal media. The different medium is effective for isolating C.jejuni /coli from human stool.

We aimed to use of the selective medium and compares charcoal medium and campylobacter blood agar base medium for the isolation of Campylobacter jejuni from stools of patients with diarrhea.

Methods: C. jejuni /coli used in this study was isolated fecal samples from different patients with acute diarrhea disease. Stool diluted in 500 µl PBS and 100µ added to thioglycollate medium was incubated over night under microaerophilic environment at 42 oC. then cultured in charcoal and campylobacter blood agar base medium and Campylobacter antibiotic supplement (MERK) including antibiotic such as vancomycin, trimethoprim, polymixine B, diluted in 2ml of sterile distilled deionized water was added to the medium for C. jejuni or C.coli growth and incubated at 48 hr under microaerophilic conditions (5% O2, 10% CO2 and 85% N2) using CampyPak (BD, Oxoid) gas generating packs. C. jejuni or C.coli colonies were tested for biochemical characters, Gram’s staining, oxidase, catalase and hippurate hydrolysis.

Results: 30 fecal samples were selected from different patients with acute diarrhea disease. Then identical on both charcoal and campylobacter blood agar base medium. C. jejuni and C. coli were recovered, growth was pure on 9 charcoal cultures but on only 3 campylobacter blood agar cultures.

Conclusion: The ability to support the growth of C. jejuni is the most important features of a selective isolation medium. Charcoal medium was more effective than campylobacter blood agar medium for the isolation of C. jejuni or C. coli from stool.

**Campylobacter jejuni/coli, medium, stools**

**Presentation: Poster**