Campylobacter jejuni Bacteremia in a Patient with Acute Lymphocytic Leukemia (first report in Iran)

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**ARTICLE INFO**

**ABSTRACT**

**Keywords:**
Acute Lymphocytic Leukemia (ALL)
Bacteremia
Campylobacter jejuni

**Introduction:** Campylobacter jejuni is a slender, motile, non-spore-forming, helical-shaped, gram-negative bacterium. It is one of the most common causes of human gastroenteritis in the world. The aim of this study was to present a patient with acute lymphocytic leukemia (ALL), who was infected with Campylobacter jejuni.

**Materials and Methods:** We describe the medical records of a pediatric ALL patient with bacteremia caused by C. jejuni, who was diagnosed at Amir hospital, Shiraz, Iran. This 14-year-old male visited the emergency department of Amir hospital with night sweats, severe polar high-grade fever, reduced appetite, and nausea in August 2013. Given the suspected presence of an anaerobic or microaerophilic microorganism, aerobic and anaerobic blood cultures were performed using an automated blood cultivator, the BACTEC 9240 system. In order to characterize the isolate, diagnostic biochemical tests were used. Antibiotic susceptibility testing was done with the disk diffusion method. The primary culture was found to be positive for Campylobacter, and the subculture of the solid plate yielded a confluent growth of colonies typical for Campylobacter, which was identified as C. jejuni by morphological and biochemical tests. The isolate was resistant to ciprofloxacin, cefotaxime, cephalaxin, piperacillin/tazobactam, nalidixic acid, aztreonam, cefuroxime, cefixime, ceftazidime, and tobramycin.

**Results:**

**Conclusion:** C. jejuni should be considered in the differential diagnosis as a potential cause of bacteremia in immunosuppressed patients. In cases where the BACTEC result is positive in aerobic conditions but the organism cannot be isolated, an anaerobic culture medium is suggested, especially in immunocompromised patients.