Evaluation of the Contamination of Poultry Carcasses with Campylobacter jejuni and Campylobacter coli in Southern Iran: A Molecular Study

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According to numerous reports, the contamination rates of C. jejuni (C. jejuni) and Campylobacter coli (C. coli) in animal sources, food products, and human clinical specimens were high in Iran.

Objectives: This study aimed to estimate the prevalence rate of these bacterial species in Fars province, south of Iran.

Methods: A total of 370 poultry carcasses were randomly collected from five slaughterhouses from January 2019 to June 2019. Using bacteriological and polymerase chain reaction (PCR) methods, we assessed C. jejuni and C. coli contamination rates in the samples.

Results: Based on the bacteriological results, 203 (54.8%) samples were recognized as Campylobacter species. Also, molecular analysis showed the prevalence of C. coli and C. jejuni in 73 (35.9%) and 130 (64.1%) samples, respectively.

Conclusions: Poultry carcasses are a potential public health risk regarding foodborne campylobacteriosis in south of Iran. Effective control measures and treatment strategies are necessary for poultry farms and slaughterhouses to decrease the transmission and occurrence of campylobacteriosis in human society.

Keywords: Iran, Poultry Products, Prevalence, C. jejuni, C. coli