

Prevalence and Antimicrobial Resistant of *Campylobacter Spp.* Isolated from Different Stages of Sheep Slaughter Line

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Background & Objectives: *Campylobacter jejuni/coli* are frequent causes of diarrhea in humans worldwide originating in foods of animal origin mainly from meat. The aim of this study was to determine the prevalence of *Campylobacter spp.* on sheep meat at different stages of the slaughter line: after-skinning, after evisceration and end of slaughter process.

Methods: In total 150 meat samples (50 samples per site) were collected during 10 plant visits over a period of 16-month between January 2009 and May 2010, and were analyzed for the presence of *Campylobacter*.

Results: In total, *Campylobacter spp.* was isolated from 11.3% (17 of 150) of the carcasses from the three connection sites, out of which 76.5% were identified as *C. jejuni* and 23.1% as *C. coli*. *Campylobacter* was isolated from 10%, 8% and 4% of carcasses after-skinning, after-evisceration and the end of slaughter process, respectively. Susceptibilities of 17 strains isolated were determined for ten antimicrobial drugs using the disk diffusion assay. Resistance to Ciprofloxacin was the most common finding (58.8%), followed by resistance to Nalidixic acid (47.1%), Tetracycline (41.2%), Enrofloxacin (29.4%), Ampicillin (23.5%), Amoxicillin (5.9%), and Streptomycin (5.9%). None of the isolates was resistant to erythromycin, Chloramphenicol and Gentamicin.

Conclusion: This study once more indicates the application of a preventive system such as HACCP (Hazard Analysis of Critical Control Points) is Strongly required in the contamination control of *Campylobacter* in animal slaughterhouse.

Keywords: *Campylobacter*; Prevalence; Sheep Slaughtered; Antimicrobial Resistance