

A Review on Pathogenicity and Antibiotic resistance of *Coagulase - negative staphylococci* isolated retailing chicken meat

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ABSTRACT

In this study prevalence, homology and pathogenicity of *coagulase-negative staphylococci* (CNS) isolated from 180 raw chicken meat samples in retail markets were studied. A total of 180 raw chicken meat products were randomly selected and were placed in sterilized bags and were transported to the lab on ice immediately. Diverse CNS species isolated from meat were previously reported and considered as potential pathogenic staphylococci through obtain horizontal transferred elements from other bacteria. Molecular typing showed highly homogenous patterns in the same species. Antibiotic susceptibility test revealed a common penicillin and erythromycin resistance among all of CNS, while 17 *S.epidermidis* isolates displayed multidrug resistance. Conclusively the raw chicken meat products exhibited a centralized prevalence of *S.epidermidis* and *S.warneri*, and a highly homogenous of genome in the same CNS species. Though the negative toxigenicity of CNS was determined, constant multidrug resistance in *S.epidermidis* and P-E resistance in CNS needs to be highly concerned regarding human health.

Keywords: coagulase-negative staphylococci, raw chicken meat, pathogenicity, antibiotic resistance

