SENSITIVITY OF LISTERIA SPECIES, RECOVERED FROM INDIGENOUS CHICKENS TO ANTIBIOTICS AND DISINFECTANTS


ABSTRACT

Background: Resistance of bacteria to antibiotics and disinfectants has been reported widely in the world. Listeria monocytogenes is no exception, although normally it tends to be variably sensitive to many antibiotics and disinfectants.

Objectives: To assess the susceptibility of Listeria isolates recovered from indigenous chickens to commonly used antimicrobials.

Design: Nine Listeria isolates recovered from village chickens were tested for sensitivity to commonly used antibiotics and disinfectants and compared with Listeria monocytogenes type strains (L028 and DGH), Staphylococcus aureus NCTC 6571 and Escherichia coli ATCC 25922.

Subjects: Nine Listeria isolates.

Interventions: None.

Main outcome measures: Susceptibility to eight antibiotics and seven disinfectants.

Results: The nine Listeria isolates were sensitive to gentamycin (100%), kanamycin (88.9%), tetracycline (77.8%), cotrimoxazole (66.7%), chloramphenicol (66.7%) and resistant to ampicillin, augmentin and cefuroxime. There was no difference between the antibiotic sensitivity to the various Listeria isolates and Listeria monocytogenes type strains (P>0.05). The isolates were sensitive to disinfectants: A (100%), B (88.9 %), D (77.8%), E (77.8%) but resistant to, CF, and G. There was significant difference between the resistance of Listeria isolates to the various disinfectants at the varied dilutions and the resistance at the recommended user - dilution (P<0.00293).

Conclusion: This study has shown that some of the Listeria isolates were resistant to most common antimicrobial agents except gentamycin and disinfectant A. Hence the need to consider this resistance pattern for effective treatment and control of listeriosis.