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SUMMARY

L. monocytogenes is recognized as a food borne pathogen of major significance responsible for gastroenteritis and more severe manifestation including septicemia, encephalitis, abortion and may end with death.

The implication of variety of food product mostly of dairy and meat origin in outbreaks and sporadic cases increasing occurrence in the last 20 years of listeriosis outbreaks associated with the consumption of contaminated food with *L. monocytogenes* so it is considered as one of the most important food pathogen.

So the present study aimed to characterize *L. monocytogenes* isolated from different food origin.

A total of 79 *Listeria* species isolated from 650 samples of different foods (500 dairy products, 50 minced meat and beef burger, 50 chicken fillet, and 50 seafood).

In this investigation, the recovery rate of *Listeria* from examined samples was 12.1%. From 79 *Listeria* isolates 25 isolates (3.8%) were identified as *L. monocytogenes* isolated from sea food, chicken fillet, meat and meat products and dairy products with incidence of 12%, 8%, 4% and 2.6% respectively.

14 selected *L. monocytogenes* isolates (5 from dairy products, 5 from sea food, 2 from meat and 2 from chicken fillet) and reference strain were characterized serologically (4 isolates belonging to serotype (1), 8 isolates belonging to serotype (4) and 3 isolates were untyped by the available antisera).

Then these isolates were characterized by determination of some virulence attributes.

- a) Detection of lecithinase activity (8 isolates were lecithinase positive and 7 were lecithinase negative)
- b) Detection of hemolysis, all isolates were β hemolytic.
- c) Detection of motility, all isolates were motile at room temperature.
- d) Detection of pathogenicity in rabbit and mice.

The isolates show different degrees of conjunctivitis and were **fatal** to mice.

In vitro sensitivity pattern of 14 isolates and reference strain **was** done against 17 chemotherapeutic agents.

Plasmid profile analysis **revealed** 3 out of 14 isolates containing plasmid

Detection of listeriolysin O using SDS-PAGE

And finally the interaction between NaCl different concentration at 4 ° C , 22 ° C and 37 ° C and its effect on a variability of 14 selected isolates and reference strain was **determined**.