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ENTEROPATHOGENIC AND ENTEROTOXIGENIC EFFECTS OF INDUCED *SALMONELLA GALLINARUM* INFECTION IN BROILER RABBITS

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ABSTRACT

Chickens are the natural hosts of *Salmonella gallinarum*, the causative organism of fowl typhoid. Its host perimeter is limited to galiforme birds. It is a systemic disease of chickens, and rarely infects mammals. An anonymous etiopathological investigation in farm rabbits in India has revealed its association with enteritis. The present investigation was conducted to evaluate the effect of induced *Salmonella gallinarum* infection in Chinchilla (Broiler) rabbits, pertaining to the enteropathogenic potential of the microorganism and its enterotoxins. The experimental rabbits were inoculated with *Salmonella gallinarum* organisms (WCP) and the enterotoxins extracted from the local isolates of *Salmonella gallinarum* (CFP) in the intestinal loops. The dilatation index (DI) of the intestinal loops of the experimental animals inoculated with WCP and CFP were below the critical level (0.5), reflecting that *Salmonella gallinarum* was a non-enteropathogenic, and non-enterotoxigenic pathogen. The clinical signs and pathological changes of liver, spleen, heart, kidneys and intestine in infected rabbits were similar to those observed in chickens.

KEY WORDS

Chinchilla rabbit, Enteropathogenic, Enterotoxigenic, *Salmonella gallinarum*

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