

Isolation and Identification of Campylobacter organisms From Ducks with Experimental Study in Ducklings and Chicks.

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Abstract

A total of 580 samples (230 from organs of freshly dead ducks, 240 cloacal swabs from apparently healthy ducks and 110 swabs from egg shell surface) were collected aseptically from duck farms of different ages and breeds. In addition to 45 samples were collected from the surrounding environment of ducks (Water, Feeder, and Litter). All these samples were bacteriologically examined for campylobacter infection. The percentage of campylobacter isolates were 22.6% (organs of freshly dead), 12.5% (cloacal swabs) 1.8% egg shell surface, 26.6% water samples, 22.6% feed samples and 63.3% (litter). Isolated campylobacters were identified as *C. jejuni* (66%) and *C. coli* (34%). *Campylobacter jejuni* isolates were highly sensitive to norafloxacin, Gentamycin, tetracycline, Flumequin and chloramphenicol, while Erythromycin and Refampicin showed intermediate activity. It was resistant to cefalotin, Nebcin and Unacin.

Pathogenicity for one day old ducklings and chicks with one isolate of *C. jejuni* and/or *S. typhimurium* were done

Introduction

Campylobacter has emerged as a significant infection in a wide range of avian and mammalian species (34; 36). Chickens are considered a source of human infection from which the organism gained its zoonotic importance (12; 28). In chickens campylobacter infection causes a contagious disease characterized by low mortality, high morbidity and chronic course (25).

In the early nineties, Campylobacter species was the most common bacterial enteropathogen isolated from diarrheic stools in Egyptian children. The overall prevalence of campylobacter isolation was 25.9%