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ARABIC SUMMARY	

CAMPYLBACTERIOSIS IN DUCKS IN KAFR EL-SHEIKH PROVINCE

ENGLISH SUMMARY

The present study was carried out to investigate the status of campylobacteriosis in ducks in Kafr el-Sheikh province .

For this purpose , 100 duck flocks aged 1-6 weeks of native , Peking and muscovy breeds were examined also 100 adult duck flocks through fecal swabs and their drinking water , 100 samples of dead in shell embryos and 100 samples of non fertile eggs were examined .

The incidence of infection was 21% (dead or diseased ducklings) , 18 % (fecal swabs) , 19 % (drinking water) , 11 % (dead in shell embryos) and 0 % (non fertile eggs) .

The naturally infected ducks showed signs of whitish diarrhea besides general signs of illness with postmortem lesion of congestion of liver and intestine which may have mucoid content (sometimes hemorrhagic) and in few cases liver with necrotic patches or sub capsular hemorrhage .

The disease was diagnosed through isolation of the microorganism on the specific medium (thioglycolate broth) and blood agar (in micro aerobic conditions) and identification with specific methods . The isolated

Campylobacter strains were identified as *Campylobacter jejuni* and *Campylobacter coli* .

SDS-PAGE electrophoresis (through OMP) was carried out to study and compare the protein profile of the isolated strains of *Campylobacter* from ducks . Also comparative electrophoresis between *Campylobacter* strains isolated from ducks others isolated from chickens .

Experimental infection was designed to test the pathogenicity of *Campylobacter jejuni* and *Campylobacter coli* for two weeks old Peking ducks either each alone or together .

The severity of infection increased with *Campylobacter jejuni* than *Campylobacter coli* . Clinical signs , postmortem changes and mortalities were recorded . The percentage of re-isolation of the organism was higher in the first week .also the re-isolation was higher in the groups which received *Campylobacter jejuni* only . Also , the re-isolation of *Campylobacter jejuni* was higher from jejunum while the *Campylobacter coli* was re-isolated highly from caecum .

The histopathological changes of experimentally infected duck is recorded and the lesion score increased in the second group which received mixed infection and the liver and jejunum were greatly affected .

The antibiogram was carried out for the organism revealed that it was highly sensitive to enrofloxacin , erythromycin and gentamycin .

CONCLUSION

Campylobacteriosis is a wide spread disease in Kafr El-Sheikh province that affect ducks causing diarrhea and decrease in body weight .

The infected ducks could transmit the infection to contact bird and the contaminated carcasses could be a possible cause of food poisoning to human consumers.

The organism is very sensitive to enrofloxacin , erythromycin and gentamycin .

Consulting the available literature and our results , it is clear that the campylobacteriosis in ducks must be controlled for its economic and zoonotic importance .

Nevertheless ,data here confirm that a wide variety of avian species can commensally harbor and potentially shed Campylobacter into food animals environments and should therefore be considered potential reservoirs for the human pathogen .