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Summary

A total number of 270 samples were taken from private farms in EL-Minia governorate in Samalot, Bany Mazar, and Dear EL-garnos also another samples were collected from house raising turkey in Sohage governorate.

A number of 200 Cloacal swabs from live birds and 70 samples of freshly dead or scarified birds, collected samples were examined for post mortem changes and also bacteriologically for possible recovery of *C. perfringens*.

The current study revealed the following results:

- A number of 94 *C. perfringens* isolates were successfully isolated from 200 cloacal swabs from live birds with an incidence of 47%. All these isolates were morphologically and biochemically identified.
- A number of 36 *C. perfringens* isolates were successfully isolated from 70 intestinal samples of freshly dead or scarified birds with an incidence of 51.4%.
- The incidence of clostridial infection in the intestinal samples (51.4%) was higher than those of cloacal swabs (47%).
- According to the age susceptibility, the highest incidence of *C. perfringens* was detected in order birds (2-3 months) with an incidence of 57% than those of younger ages (15- 70 days) with an incidence 42%.
- Evaluation of the *Clostridial perfringens* subspecies was detected by The Anaerobic Department in Eldokky Animal Health and Researches as 192 isolates from 270 isolates were *C. perfringens* type A with an incidence of 71.1% while 38 isolates were *C.perfringes* type D with an incidence of 28.9%.
- The pathogenicity test for 60 turkey poults (8 weeks old) raised from one day was classified to three groups every group consisted from 20 birds, the 1st group was inoculated orally by 2ml of *C. perfringens* type A broth culture, the 2nd group was inoculated orally by 2ml of *C.perfringens* type D broth culture, every group of the both 1st and 2nd group received 3 successive doses at 2 days intervals, while the 3rd group lifted as a non inoculated control.

- The mortality rate among 1st group was 8 birds with a percentage of 40%, and was 2 birds in the 2nd group with a percentage of 10%, while the 3rd group had no mortality.
- The clinical symptoms and post mortem lesion and re-isolation of the inoculated organism were described and discussed.
- The sensitivity of isolated *C. preferences* species were tested against some antibiotics in vitro both **Amoxicillin**, **Enrofloxacin**, **Ampicillin**, **Lincomycin**, **Apramycin**, and **Rifamycin** were found to be highly effective, **Oxytetracycline**, **Ciprofloxacin**, and **Doxycycline** were found to be moderate effective, while the **Streptomycin** had no effect on the isolated *Clostridium* species.