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A Note on the Occurrence of Colibacillosis in Rabbits

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Twenty five rabbits at Periyavadi village of Pudukkottai district of Tamil Nadu during the month of November – December, 2004 were reported to have died suddenly without showing any clinical signs except dullness, anorexia and overcrowding. Post-mortem examination of the carcasses revealed petechial haemorrhages in lung and liver and ecchymotic haemorrhages in trachea. *Escherichia coli* were isolated from the liver, lung and tracheal samples and identified based on morphology, cultural characters and biochemical reaction. The antibiotic sensitivity test of *E. coli* revealed sensitivity to Ciprofloxacin, Chloramphenicol, Endrofloxacin and Nalidixic acid and resistance to Ampicillin, Cloxacillin and Kanamycin. Over crowding, poor feeding, poor ventilation, improper cleaning of urine and fecal materials and general mismanagement of the rabbits were observed in this study which could be of predisposing factors for the occurrence of colibacillosis. All the rabbits were shifted to a well ventilated house and sick animals were treated with Ciprofloxacin 20mg / kg body weight orally twice a day for 5 days and the rabbits responded well to antibacterial therapy.

Key words: Rabbits, Colibacillosis, Diagnosis, Antibiogram.

Colibacillosis is one of the commonest cause of mortality in rabbits caused by *Escherichia coli.* Information about the occurrence of colibacillosis in rabbits could not be traced. Keeping in view, the present study describes an outbreak of colibacillosis in rabbits at Periyavadi village of Pudukkottai district of Tamil Nadu during the month of November – December 2004.

MATERIALS AND METHODS

Rabbits in Periyavadi village of Pudukkottai district in Tamil Nadu were reported to have died due to some unknown diseases. The rabbitry had approximately 375 rabbits, out of which about 25 rabbits died within a span of 28 days. A disease investigation was carried out to identify the etiological agent of the diseases. These rabbits were died suddenly without showing any clinical signs except dullness. Post-mortem was conducted on carcasses. Tissue samples from liver, lung and trachea were collected in bacteriological transport media and subjected to bacterial isolation as per Barrow and Feltham (1993). Blood smears and liver and tracheal impression smears were subjected to microscopic examination. The *in vitro* antibiotic sensitivity tests were carried out on Mueller Hinton agar as per the method of Bauer *et al.*, (1996) using 7 antibiotic discs supplied by M/s. Hi-Media Laboratory, Mumbai. Tests were carried out at Centre University Laboratory, DCAHS, TANUVAS, Chennai, India.

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RESULTS AND DISCUSSION

During the investigation it was observed that the rabbits showed dullness, anorexia and over crowding. Post-mortem examination of the carcasses revealed petechial haemorrhages in lung and liver and ecchymotic haemorrhages in trachea. Microscopical examination of blood smears and liver and tracheal impression smears revealed no organisms of etiological significance. *Escherichia coli* were isolated from the liver, lung and tracheal samples and identified based on morphology, cultural characters and biochemical reaction as per Barrow and Feltham (1993). The antibiotic sensitivity test of *E. coli* revealed sensitivity to Ciprofloxacin, Chloramphenicol, Endrofloxacin and Nalidixic acid and resistance to Ampicillin, Cloxacillin and Kanamycin. Over crowding, poor feeding, poor ventilation, improper cleaning of urine and fecal materials and general mismanagement of the rabbits were observed in this study which could be of predisposing factors for the occurrence of colibacillosis. All the rabbits were shifted to a well ventilated house and sick animals were treated with Ciprofloxacin 20mg / kg body weight orally twice a day for 5 days and the rabbits responded well to antibacterial therapy.

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