

AVIAN PASTEURELLOSIS IN A MALE GOOSE

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Avian Pasteurellosis is a contagious bacterial disease of domesticated and wild avian species caused by *Pasteurella multocida*. It is the most common disease affecting wild waterfowls and cause significant morbidity and mortality of migrating waterfowl (Stout and cornwen, 1976). Very little is known about the source of this infectious disease and its transmission (Botzler, 1991; Wobeser, 1992). Common synonyms of Avian Pasteurellosis are Fowl cholera and Avian haemorrhagic septicaemia. Turkeys are particularly sensitive, with mortality ranging to 65%. The recognition of this pathological condition is of ever increasing importance for differential diagnosis with avian influenza.

CASE HISTORY AND CLINICAL OBSERVATIONS

One dead male goose (gander) was brought to Veterinary University Training and Research Centre, Tiruchirapalli, Tamilnadu Veterinary and Animal Sciences University. Carcas weighed 4.2 kg and was reported to be 2 years old. The geese were fed with homemade grain reared in backyard and housed in shelter during night. The farmer reported that the affected bird died showing raised body temperature, green coloured diarrhea and complete paralysis of legs .

Postmortem lesions include hyperaemia, haemorrhages, focal necrotic areas in the liver and spleen along with slightly increased amount of pericardial fluid. The postmortem lesions observed in this case were similar to those previously described by Christensen and Bisgaard (2000).

Heart blood smear, liver and spleen impression smears were taken and examined using Leishman staining technique. The blood smear and impression smear revealed presence of bipolar organism suggestive of *Pasteurella multocida* in accordance with Purushothaman *et al.* (2008) and Sathasivam *et al.* (2009). Heart blood swab was taken from dead goose and streaked directly onto blood agar and Mac Conkey agar and incubated at 37°C for 24 hours. In blood agar characteristic of dew drop, mucoid, non haemolytic colonies were observed. No growth was observed in Mac Conkey agar. These findings are in accordance with Prabhakar (1995)

In vitro antibiotic sensitivity test was performed for the bacterial isolate in Muller Hinton agar as per the method demonstrated by Bauer *et al.* (1966). The antibiotic discs used and their concentration were as follows. Ampicillin (25µg), Chloramphenicol (30µg), Ciprofloxacin (30µg), Gentamicin (30µg), Neomycin (30µg), Oxytetracyclin (30µg), Pefloxacin (5µg) and Enrofloxacin(10 µg). The results were recorded after 24 hours of incubation at 37°C, the diameter of zone of growth inhibition were interpreted as per manufacturer's instruction. The antibiogram studies for *P. multocida* revealed sensitive for *oxytetracycline*, *gentamicin*, *ciprofloxacin*, *pefloxacin*, and *neomycin*. *esistance against ampicillin*, *enrofloxacin* and *chloramphenical*.

The farmer was advised to treat the remaining flock of geese with tetracycline hydrochloride powder at the dose of 2gm/ litre of water for five consecutive days. Cleanliness, potable water and optimal feed were recommended.

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