IDENTIFICATION OF COTUGNIA SPECIES FROM A PIGEON - A REPORT

Over 1400 species of cestodes have been described from wild and domestic birds. Many species of parasites may appear during necropsy examination of digestive tract or other internal organs of poultry. Large sized cestodes block the intestine of infected birds thus affecting the health of the bird. Species identification plays a key role in identifying the parasites and giving direction to control measures aimed to eliminate the intermediate host, by breaking the life cycle.

A pigeon was brought to University Veterinary Hospital, Mannuthy with the complaint of droopiness and debility. Routine clinical examination was carried out. Blood and faecal sample collected for examination were brought to Department of Veterinary Parasitology for detailed study. Examination of Giemsa stained blood smears revealed Haemoproteus columbae in erythrocytes. Gross examination of faecal sample revealed tapeworm segments. Both mature and gravid segments obtained from the faecal matter were routinely processed. Mature segments were 80 to 85 mm in length and 4 to 5 mm in breadth and carried two sets of reproductive organs with bilateral genital pore (Fig.1). Gravid segments were broader than long and contained several hundreds of egg capsules (Fig. 2). Each egg capsule had typical taenid egg (55 to 70 µ) with onchosphere (28 to 30 µ) having hooks (Fig. 3). The cestode was identified as belonging to Cotugnia sp. Since the whole worm could not be obtained speciation study could not be done. The bird was treated with Chloroquin tablets @ 5mg/kg for five days for Haemoproteus infection and was advised praziquantel tab @10mg/kg as a single dose after one week.

The common species of Cotugnia in domestic fowls, ducks and pigeons is C. digonopora. Cotugnia brotogeris and C. fastigata are also seen in domestic fowl and ducks. These cestodes are of low pathogenic significance but heavy infections may affect the health of the bird. The life history of none of the species of Cotugnia is fully elucidated. Infection is acquired through the ingestion of infected intermediate hosts such as earthworms, grasshoppers, flies, ants or beetles. Effective treatment of avian cestodes can be achieved with praziquantel, mebendazole or niclosamide. Control depends on the treatment of infected birds with a suitable anthelmintic and the destruction or removal of intermediate hosts where possible.

Summary
A report on identification of Cotugnia sp. from a pigeon is placed on record.

References

H. Shameem¹, H. Subramanian² and T. S. Rejitha³
Department of Veterinary Parasitology
College of Veterinary and Animal Sciences
Mannuthy - 680 651, Thrissur, Kerala

¹. Assistant Professor
². Dean
³. Veterinary Surgeon, AHD, Kerala