SUCCESSFUL MANAGEMENT OF SPIROCERCOSIS IN A DOG

A.A. Sanghai, G.R. Bhojne and N. P. Dakshinkar
Department of Veterinary Clinical Medicine, Ethics & Jurisprudence
Nagpur Veterinary College, Nagpur - 440 006.
[Received: 22.5.2015; Accepted: 23.11.2015]

A 8 year old female German Shepherd dog was presented with chief complaint of persistent vomition. On clinical and laboratory investigation the case was diagnosed as Spirocercosis. Dog was successfully treated with Ivermectin.

Key words: Spirocercosis, Canine,

Spirocercosis is a disease caused by the nematode Spirocerca lupi. Spirocerca lupi is a parasite of dogs that can also affect other animals, mainly carnivores such as foxes, wolves, coyotes, and wild felidae. It has a worldwide distribution, but is most prevalent in warm climates. It is transmitted to dogs through ingestion of coprophagous beetles or paratenic hosts, including birds, lizards and rodents.

The pathogenesis of spirocercosis results from the migration and prolonged presence of infective larvae and adults in the host’s tissues. Typical esophageal nodular masses, that might undergo neoplastic transformation, and aortic scars and aneurysms are the most frequent lesions, and are considered pathognomonic (Merwe et al., 2008). Spirocerca lupi infection is usually subclinical. Young adult and large-breed dogs are apparently more prone to develop clinical spirocercosis, with Labrador Retrievers, German Shepherds and Hellenic hounds being over represented. When the infection is clinically evident, it is mainly manifested by regurgitation, repeated attempts to swallow (odynophagia), and hyper salivation.

Case history and Clinical observations
A female German shepherd dog of 8 year old presented to Teaching Veterinary Clinical Complex, Nagpur Veterinary College, Nagpur; with complaint of vomiting since one month. History reveals that the dog vomits after the intake of solid food only and not with liquid diet. The dog was not dewormed since last 6 months. The appetite was decreased. On clinical examination Temperature was 101.2 °F, the dog has progressive weight loss, dull and inactive. Mucous membrane was normal, heart rate 78 bpm, urination and defecation normal.

For laboratory investigation blood sample was taken from peripheral vein and feaces was collected for parasitological investigation. The haematobiochemical findings reported that BUN 28mg/dl, Serum Creatinine 1.13 mg/dl, Haemoglobin was 9.8 gm%. Fecal sample was examined with sedimentation technique. The parasitological investigation revealed embryonated, thick-shelled, small parasitic ova of Spirocerca lupi. Hence the case diagnosed as spirocercosis.

Treatment
The dog was treated with Injection Ivermectin (Doramectin) at the rate of 200 g/kgSC at 14-day intervals for three successive treatments. The owner was advised to maintain the dog on semisolid diet for a month and then gradually to turn on solid diet. The fecal sample was examined at every 14 days interval. The sample was found negative after third treatment.

Discussion
Spirocercosis (Spirocerca lupi) in dogs has been mostly associated with the presence of esophageal granulomas that may transform to sarcomas; aortic
aneurysms; mid-thoracic spondylitis, but in maximum cases it remain in subclinical form. In the present case the main complaint was recurrent vomiting. Mazaki *et al.*, (2002) and Mylonakis *et al.*, (2006) reported that the dog with Spirocercosis infection shows the symptoms of vomiting, spondylitis, weight loss and regurgitation.

In the present study there were no alteration in haematological and serum biochemical parameter in experimentally induced spirocercosis dogs.

The diagnosis of spirocercosis is done on the basis of fecal sample examination, thoracic radiography and endoscopy. But sometimes in thoracic radiography the nodules are not observe or diagnose so best method is fecal sample examination and endoscopy (Mazaki *et al.*, (2002); Mylonakis *et al.*, (2006); Sueur *et al.*, (2010) and Aroch *et al.*, (2011). In the present study the dog was successfully treated with Injection doramectin@ 200 g/kg body weight in three consecutive treatments. Ettinger and Feldmen (2010) documented that *Spirocerca lupi* infection in dogs was successfully treated with Ivermectin and Doramectin @ 200 to 400 g/kg body weight in 3 to 6 treatments.

**References**


