

## CANINE SPIROCERCOSIS AND ASSOCIATED PATHOLOGIES: FIFTEEN CASES

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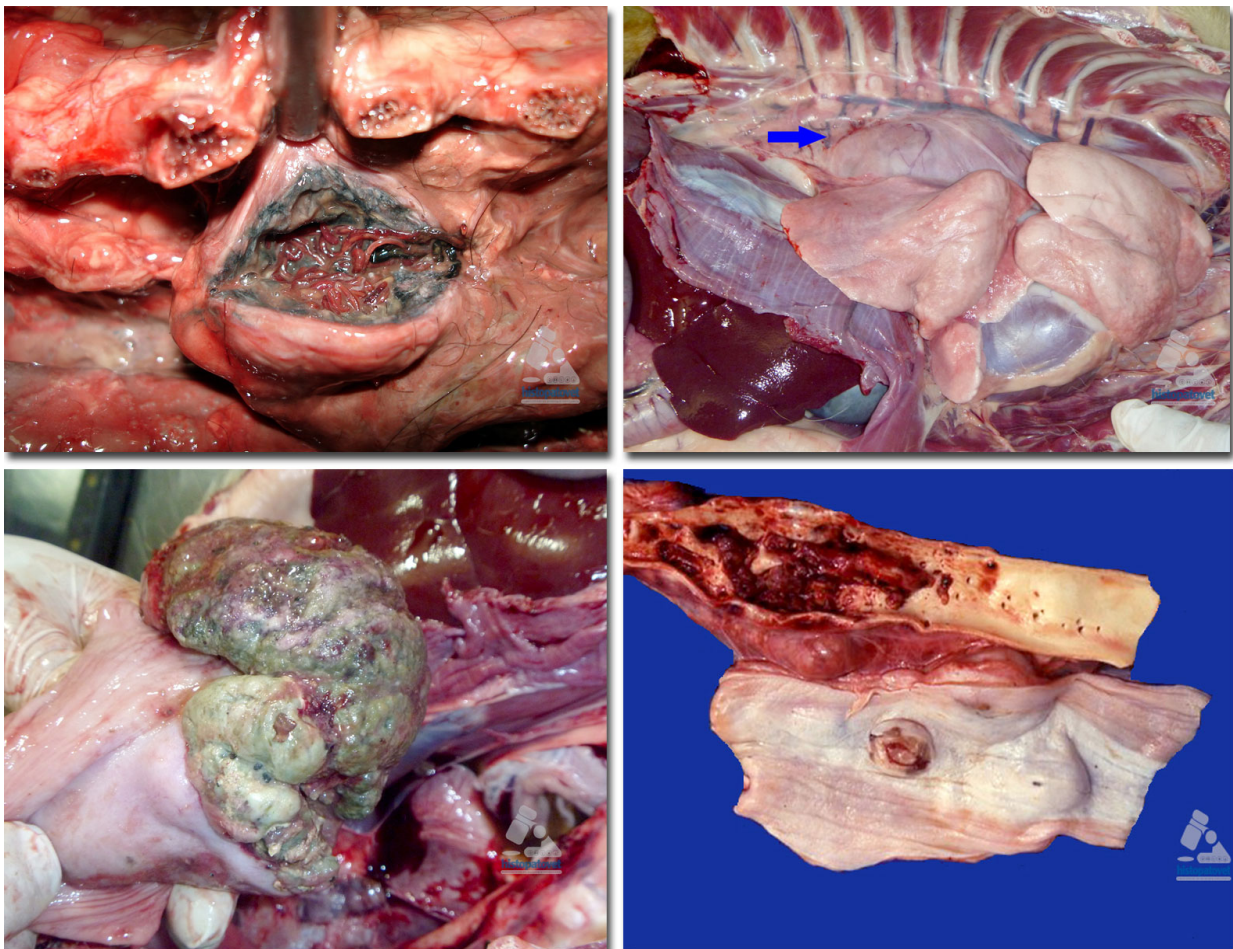
**AIM OF THE STUDY:** to describe the lesions observed in fifteen dogs from Costa Rica with esophageal Spirocercosis (*Spirocerca lupi*).

**MATERIAL & METHODS:** during 10 years 726 dogs necropsies were performed. In fifteen of these dogs the characteristic esophageal nodules with a nematode identified as a *Spirocerca lupi* were observed.

The breed included 6-mixed breed, 6 German shepherds and 3 others (Siberian Husky, Boxer, Doberman). Nine dogs were 4 years or older, three were younger (21/2 years, one year and 6 days old), and in three cases, the age was no record. The gender included 9 males and 5 females, and one case was no record.

The gross lesions were record and samples from multiple organs were processed for histopathological examination. In two dogs an immunohistochemistry study was carried out (Cordoba. Spain).

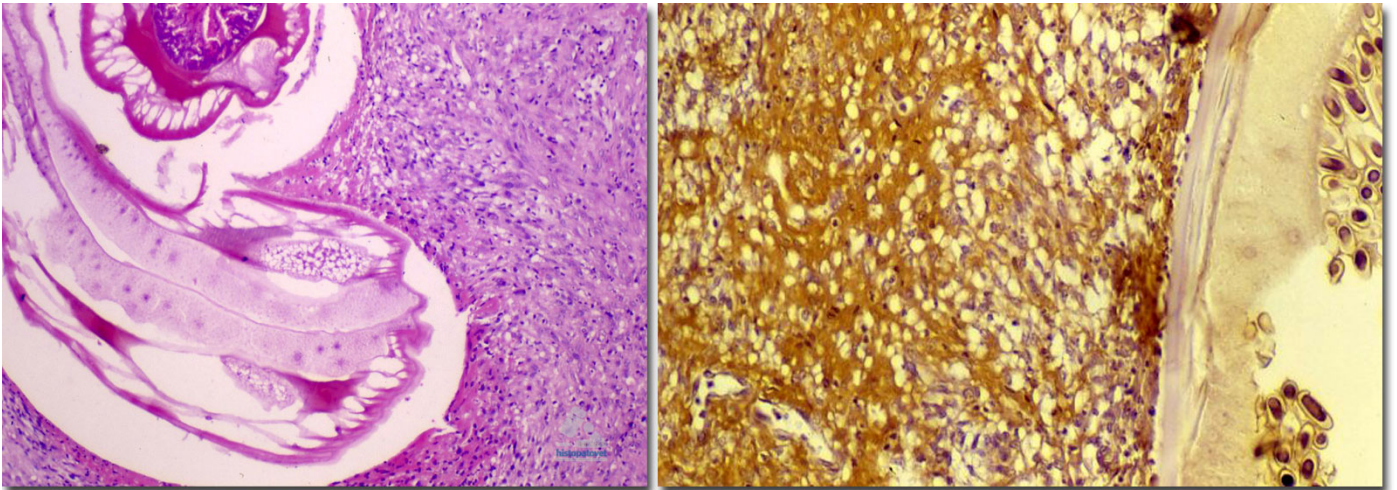
**RESULTS:** all 15 dogs showed 1 to 4 parasite nodules, in the thoracic esophagus. In two dogs aberrant parasite migration was found (pericardium and abdomen). Two dogs had an esophageal osteosarcoma; another dog had a bilateral pyothorax due to a perforation of one parasite nodule. In addition, 4 dogs showed a thoracic aortic aneurysm. See the following 4 figures.



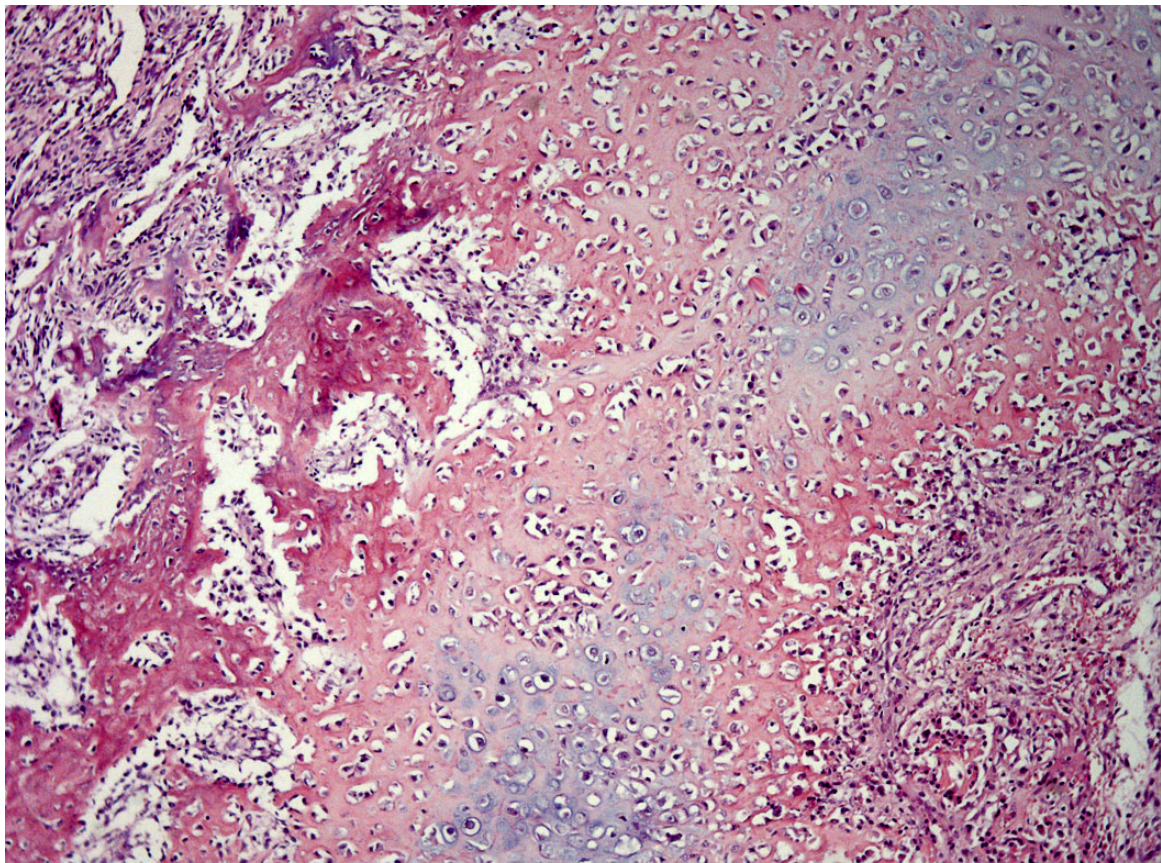
Upper left. An esophageal nodule (open) showing red parasites (*S.lupi*). Upper right. Blue arrow. A large esophageal mass.

Bottom. Left. The mass is open with a necrotic tissue (fibrosarcoma). Right. Aorta with aneurysm.

The histopathology esophageal examination was done only in 8 cases, and in seven of those a fibrosarcoma was observed, besides the chronic inflammatory reaction. In two dogs there were a pulmonary metastasis. In two of the fibrosarcomas the immunohistochemistry was positive only to vimentin. See the next 3 pictures.



A fibrosarcoma with two *S. lupi* sections. Vimentina positive.



An osteosarcoma.

**CONCLUSION:** Spirocercosis is not an important disease as a cause of death, however, it causes an insidious chronic illness mainly with dysphagia, vomiting, and lost weight. Moreover, as we reported in this study a high percentage of Spirocercosis cases developed a fibrosarcoma or osteosarcomas, which might make treatment more difficult.