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Intestinal-peritoneal Coelioscopy for the Diagnosis of a Mesothelioma in a Pet Chicken (*Gallus gallus domesticus*)

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Abstract: An adult female chicken (*Gallus gallus domesticus*), from a small backyard flock, was presented to the Ontario Veterinary College Avian and Exotics Service for evaluation of dyspnea and recurrent ascites. An antemortem diagnostic evaluation included a coelomocentesis, coelomic ultrasound, and a coelioscopy procedure. A sample of the fluid collected during the coelomocentesis was submitted for analysis and was determined to be a non-specific modified proteinaceous transudate. The coelomic ultrasound examination identified numerous coalescing fluid-filled and solid nodules throughout the coelom. However, no site of origin of the nodules could be identified. A coelioscopy of the intestinal-peritoneal cavity was performed using a ventral midline approach, and biopsies collected during the procedure were submitted for histologic examination. The pathologic diagnosis of the biopsy samples was a disseminated neoplasia, presumptively coelomic adenocarcinoma. The chicken received palliative treatment which included periodic coelomocentesis, meloxicam, antibiotics, and deslorelin following the diagnosis of a disseminated neoplasia. Three months following initial presentation the patient was euthanized. A postmortem examination with histopathology confirmed the tissue biopsy results of coelomic neoplasia. Further immunohistochemistry supported mesothelioma as the definitive diagnosis. This case documents the usefulness of intestinal-peritoneal coelioscopy in identifying neoplasia as the cause of ascites in a pet chicken as well as describing the clinical features and progression of a mesothelioma in this species.