abdominal mass involving the caudal right ureter. Severe hydronephrosis cranial to the mass and concurrent severe hydronephrosis were present, as well as a small additional mass at the right caudoventral aspect of the abdomen. Exploratory coeliotomy and a right sided ureteronephrectomy were performed as excisional biopsy of both the ureteral mass and additional mass in the omentum.

RESULTS

Histopathology and immunohistochemistry of the ureteral mass revealed a poorly differentiated sarcoma with suspected metastases to the omentum that expressed vimentin and did not express pan-cytokeratin, desmin, or S100. Low numbers (estimated <5%) of perivascular neoplastic cells expressed smooth muscle actin. Adjuvant chemotherapy treatment consisting of 5 cycles of doxo-

rubin and alternating cyclophosphamide was administered with the aim of delaying further metastasis and local recurrence. Re-staging with CT was performed 137 days after the initial surgery and revealed a large mass in the right caudal abdomen, closely associated with the urinary bladder. This was considered to be compatible with the recurrence of the ureteral sarcoma. Rescue therapy with metronomic chlorambucil and firocoxib was then initiated. Two weeks later, the dog developed haematuria, progressive lethargy and anorexia. Subsequently euthanasia was performed 175 days after the initial diagnosis.

STATEMENT (CONCLUSIONS)

To the author's knowledge this is the first report of undifferentiated ureteral sarcoma treated with nephrectomy and adjuvant chemotherapy.

Pulmonary Adenocarcinoma: Successful long term outcome after surgical excision, chemotherapy and metastasectomy in a dog

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OBJECTIVES

This report describes the successful use of surgical excision, chemotherapy and metastasectomy for the treatment of primary and metastatic pulmonary adenocarcinoma in a dog.

METHODS

An eight year old female entire Lurcher was referred to the oncology service for a right lung lobe lesion, diagnosed by radiography at her referring vets. Computed tomography (CT) revealed a right accessory lung lobe

lesion (6.5 x 6.0 x 6.4cm) with multifocal nodules in the left cranial (3) and caudal (1) lung lobes. Fine needle aspirate was consistent with pulmonary adenocarcinoma. The accessory lung lobe was surgically excised. Histopathology confirmed pulmonary adenocarcinoma with complete excision. Vinorelbine chemotherapy (eight doses) began post-operatively.

Nine months post-operatively, CT restaging revealed resolution of the left cranial lung lobe lesions; however, the left caudal lung lobe lesion had increased in size. A repeat course of vinorelbine chemotherapy began (eighteen additional doses). At twenty two months post initial surgery, restaging revealed a 35% increase in the size of the lesion. Despite changing chemotherapy agent to carboplatin (3 doses), the lesion increased in size by 20%. Twenty five months after initial surgery a metastasectomy was performed. No chemotherapy treatment was continued.

RESULTS

CT revealed no evidence of metastasis at six and fourteen months post metastasectomy. The patient was subsequently lost to follow up, forty three months after initial presentation.

STATEMENT (CONCLUSIONS)

Surgical removal of primary and metastatic pulmonary adenocarcinoma, combined with chemotherapy, can give good long term outcomes. Metastasectomy is rarely recommended in veterinary patients; however it can be of significant benefit when considered in specific cases.