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PRIMARY PULMONARY NEOPLASMS IN THE DOG: A REVIEW OF 29 CASES

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FROM 1952 TO 1965, 29 HISTOLOGICALLY CONFIRMED PRIMARY LUNG NEOPLASMS WERE DIAGNOSED OUT OF A CLINIC POPULATION OF APPROXIMATELY 72,000 DOGS AT THE UNIVERSITY OF PENNSYLVANIA VETERINARY HOSPITAL. STRICT DIAGNOSTIC CRITERIA WERE UTILIZED IN DETERMINING THE IDENTITY OF THE TUMORS. OF THE 29 NEOPLASMS, 28 WERE CARCINOMAS AND 1 WAS A FIBROSARCOMA. THE CARCINOMAS WERE CLASSIFIED INTO 3 GENERAL CATEGORIES: ADENOCARCINOMA (12); SQUAMOUS (3) AND ANAPLASTIC (4) CARCINOMAS; OR COMBINATIONS THERE-OF (9). *(=pleomorphic incl. squamous)*

NINE LUNG TUMORS WERE DIAGNOSED BETWEEN 1952 AND 1958 AS CONTRASTED TO 20 FROM 1959 TO 1965. THIS INCREASE WAS PROBABLY RELATED TO GREATLY INCREASED DIAGNOSTIC STUDIES RATHER THAN TO A TRUE RISE IN DISEASE OCCURRENCE. THERE WAS NO SEX PREDILECTION (15 MALES AND 4 FEMALES). THE AVERAGE AGE WAS 10.8 YEARS, AND THE YOUNGEST DOG IN THE SERIES WAS 7 YEARS OLD. THE BOXER WAS THE ONLY BREED WHICH SHOWED AN APPARENT PREDISPOSITION TO PULMONARY NEOPLASIA.

DURATION OF CLINICAL SIGNS RANGED FROM 1 WEEK TO 7 MONTHS, WITH AN AVERAGE DURATION OF 9.6 WEEKS. THE COMMONEST CLINICAL FINDING WAS A NONPRODUCTIVE COUGH. THERE WAS NO PREDILECTION AS TO THE LOBE OF ORIGIN OF THE TUMORS. OF THE 18 DOGS NECROPSIED, 17 HAD LUNG METASTASES. OTHER IMPORTANT METASTATIC SITES WERE THORACIC LYMPH NODES AND BONE.

THE BIOLOGICAL BEHAVIOR OF THE CARCINOMAS APPEARED TO BE CORRELATED WITH THEIR HISTOPATHOLOGIC TYPE. ONLY 50% OF THE ADENOCARCINOMAS METASTASIZED AS COMPARED WITH 100% OF THE SQUAMOUS OR SQUAMOUS MIXED AND 90% OF THE ANAPLASTIC OR ANAPLASTIC MIXED CARCINOMAS. IN THE FEW CASES TREATED SURGICALLY, POST-SURGICAL SURVIVAL WAS 2 MONTHS OR LESS.

"ALTHOUGH LUNG CARCINOMAS HAVE BEEN PRODUCED EXPERIMENTALLY IN DOGS BY THE INTRABRONCHIAL INSTILLATION OF TOBACCO SMOKE CONDENSATE, DIMETHYLBENZANTHRACENE AND METHYLCHOLANTHRENE, ALMOST

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