**Abstract**

*Introduction***:** Subaortic stenosis (SAS) is one of the most common congenital cardiac diseases in dogs. The objective of this study was to provide survival times on a large population of dogs with SAS and to propose a redefined pressure gradient (PG) scale for mild, moderate, and severe disease classification.

*Animals, Materials and Methods:* Dogs were divided into three groups based on the Doppler-derived PG across the stenosis. Disease severity was defined as: mild = PG <50 mmHg; moderate = PG range 50-130 mmHg; and severe = PG >130 mmHg. Over the study period (1999-2011), 166 client-owned dogs were diagnosed with SAS of which 129 had follow-up information available.

*Results*: Kaplan Meier survival analysis of all-cause mortality showed median survival time for the severe group was 3.0 years, moderate was 8.3 years, and mild was 11.0 years. Univariate analysis examining the effect of PG, age at diagnosis, and sex found only PG and age at diagnosis had a significant effect on survival. Adjusted survival curves showed that the survival time in the severe group was decreased for both all-cause mortality and cardiac-cause mortality compared to the mild and moderate groups.

*Conclusion*: Based on this study, a PG > 130 is an appropriate indicator of severe disease as these dogs are at highest risk for cardiac-related death.

Keywords: congenital heart disease, echocardiogram, disease classification, survival time

**Tables**

**Abbreviation table**

CL Confidence Limits

HR Hazard Ratio

PG Pressure Gradient

SAS Subaortic Stenosis

LVOT Left Ventricular Outflow Tract