BRACHYCEPHALY AND CARDIOPULMONARY HEALTH IN CATS

PROJECT STUDY: The effects of brachycephalic conformation on cardiopulmonary health in cats

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At this time, the investigators have enrolled fourteen cats for initial evaluation and surgery, and eight cats have completed the 3-month follow-up assessment and full statistical evaluation. Initial evaluation of their preliminary data in only their cats suggests that the pulse oximetry readings and partial pressure of arterial oxygen may not differ significantly from pre- to postoperative. Evaluation of additional cats is needed.

However, echocardiographic studies in all eight cats completing the follow-up assessment have revealed that the normalized pulmonary artery transit times (nPTT) were elevated in all cats prior to nares surgery and decreased to within normal limits in all cats postoperative- a remarkable finding that has already achieved statistical significance! This finding also has significant implications for association between brachycephaly and risk for development of cardiopulmonary disease.

Further, we are also seeing striking trends in change of other data from pre- to postoperative, including decreased presence and frequency of stertor or noisy breathing; decreased presence and frequency of open-mouth breathing; decreased incidence and duration and improved response to therapy of upper respiratory tract infections; significantly improved activity level; significantly improved ability to eat and drink without difficulty; and significantly improved total quality of life score.

An abstract is due to be presented at the American College of Veterinary Surgeons Surgery Summit, which will not be held in person, but may be held online October 22-24, 2020.

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