EVALUATING A NOVEL STRATEGY FOR DIAGNOSING REFLUX IN CATS

PROJECT STUDY: BARF (Biomarkers of Aerodigestive disorders involving Reflux, with Fluoroscopy): a novel strategy for diagnosis of reflux in cats.

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The investigators’ current protocol involving videofluoroscopic swallow studies (VFSS) and protein evaluation of the oropharynx has been agreed upon based on preliminary canine data. Thirteen healthy cats underwent VFSS collected at 30/fps to allow determination of feline swallow metrics. These were compared against archived VFSS from dogs that had previously undergone the same protocol. This allowed them to identify a minimum of 5 VFSS metrics that were objectively different between species affecting multiple phases of swallowing (i.e., pharyngeal and esophageal). This normative information is critically important in interpreting clinical patients since the use of canine specific metrics may result in an inappropriate diagnosis.

Prior to and 30min following VFSS data collection, a swab of the oropharynx was collected. These were banked and submitted for proteomic analysis by liquid chromatography mass spectrometry (LCMS). Interestingly and opposition to a previous canine study, gastrointestinal specific biomarkers were identified on OP analysis in all cats. This suggests that extra-esophageal reflux occurs as a part of the swallowing physiology in cats which is significant departure from current clinical thinking.

Publications: Two manuscripts will be prepared after the American College of Veterinary Internal Medicine Forum (ACVIM) in Baltimore in June 2020.

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