DIAGNÓSTICO DE ANGIOSTRONGILOSE CANINA UTILIZANDO O LAVADO BRONCOALVEOLAR

(DIAGNOSIS OF CANINE ANGIOSTRONGYLOSIS USING BRONCHOALVEOLAR LAVAGE)

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Angiostrongylus vasorum is a cardio-pulmonary nematode of domestic dogs and wild canids, which can cause clinical and pathological signs such as: pneumonia, exercise intolerance, weight loss, anemia, cough, heart failure, pulmonary fibrosis and death. The gold standard diagnosis of angiostrongylosis is the Baermann, exam based on the finding of first stage larvae in the feces of infected animals. The bronchoalveolar lavage (BAL) allows the recovery of cells and other elements from the lungs, and is used for diagnostic evaluation of respiratory diseases in humans and animals. The aim of this study was to evaluate the BAL as a diagnostic tool in acute and chronic stages of canine angiostrongylosis. The BAL technique was performed in seven animals experimentally infected with A. vasorum, and five non-infected animals, defined as the control group on days: 0, 30, 60, 90, 120, 180, 240 and 330. The animals were solid fasted for 12 hours before fluid therapy with saline solution and intravenous anesthesia, followed by 0.044 mg/kg of atropine sulfate subcutaneously, and, fifteen minutes later, 1 mg/kg of acepromazine associated with 5 mg/kg of ketamine intravenously. After sedation and anesthesia, intubation was performed using a cuffed endotracheal tube. Through the tube, a flexible probe was introduced and connected to a syringe, allowing the application of 5 mL/kg of body weight in sterile PBS solution containing 3% of fetal bovine serum at 37°C. This solution was inoculated and immediately aspirated. The retrieved content was measured, placed in conical centrifuge tube (15 mL) and kept on ice. Sixty days after infection, active and live larvae were recovered with the BAL. These results show that BAL is an efficient technique for the diagnosis of canine angiostrongylosis, and allows the recovery of cells and other elements that provide important information regarding lung inflammation caused by A. vasorum in dogs.

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