

**CLINICO PATHOLOGICAL AND BRONCHIAL
CYTOLOGIC EVALUATION OF RESPIRATORY
DISORDERS IN DOGS**

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Thesis submitted in part fulfilment of the requirements for the degree of

MASTER OF VETERINARY SCIENCE

in

CLINICAL MEDICINE AND THERAPEUTICS

to

Tamil Nadu Veterinary and Animal Sciences University,
Chennai.

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CHENNAI 600 007**

1999

CERTIFICATE

This is to certify that thesis entitled "**CLINICO PATHOLOGICAL AND BRONCHIAL CYTOLOGIC EVALUATION OF RESPIRATORY DISORDERS IN DOGS**" submitted in part fulfillment of the requirements for the degree of **MASTER OF VETERINARY SCIENCE** in Clinical Medicine and Therapeutics to the Tamil Nadu Veterinary and Animal Sciences University, Chennai, is a bonafide research work carried out by **G.R. BARANIDHARAN** under my supervision and guidance and that no part of this thesis has been submitted for the award of any other degree, diploma, fellowship or other similar titles or prizes and that the work has not been published in part or full in any scientific or popular journal or magazine.

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ABSTRACT

CLINICO PATHOLOGICAL AND BRONCHIAL CYTOLOGIC EVALUATION OF RESPIRATORY DISORDERS IN DOGS

Name of the student	:	G.R. BARANIDHARAN
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The study was designed to establish the usefulness of Broncho Alveolar Lavage (BAL) in the etiological diagnosis of respiratory disorders in dogs. The study included 10 apparently healthy dogs and 30 clinical cases of dogs suffering from pneumonia. The clinical cases were classified into three groups viz. :-

- Group I : 11 dogs affected with bacterial pneumonia.
- Group II : 13 dogs affected with viral pneumonia.
- Group III : 6 dogs affected with mycotic pneumonia.

The following parameters were taken up for study viz. Clinical signs, Haematology, Radiography, Bronchoscopy, Broncho Alveolar Lavage (BAL), BAL cytology, BAL biochemistry, BAL microbiology.

Haematology revealed neutrophilic leucocytosis in bacterial pneumonia and mycotic pneumonia and neutropenia, leucopenia and lymphopenia in dogs affected with viral pneumonia.

Cytological analysis of the BAL fluid revealed significant neutrophilia in bacterial and viral pneumonia and less significant in mycotic pneumonia. Distemper inclusions were seen in viral pneumonia cases. Dogs with mycotic pneumonia revealed lymphocytosis in cytology.

Bronchopulmonary aspergillosis was diagnosed using bronchoscopy, BAL cytology and microbiology in six dogs.

BAL played significant role in the diagnosis of bacterial, viral and mycotic infections in dogs with pneumonia.