



# Canine Chronic Bronchitis (CB)

## What is Chronic Bronchitis?

Chronic bronchitis (CB) is a chronic inflammation of the airways accompanied by excessive mucus production. The disease is characterised by a productive cough with gagging; however dogs rarely expectorate (cough up and spit out phlegm) so this may be difficult to recognise. Instead, most dogs with CB tend to swallow the material brought up after each bout of cough and this may not be noticed by the owner. The causes of CB are poorly understood, especially because the disease is usually recognised only in its advanced stage. Several factors may cause bronchial damage predisposing to the development of CB as indicated on the table

### Possible causes of Chronic Bronchitis in Dogs

- Passive Smoking (chronic exposure to cigarette smoke in poorly ventilated/confined spaces)
- Wall-to-wall carpets (house dust mites)
- Presence of dampness or visible mould
- Previous lung infections (parasitic or bacterial)
- Genetic predisposition

## Management of Chronic Bronchitis

### 1) Avoidance of irritants

Cigarette smoke, dust, sprays from deodorants, perfumes, house cleaning products, are all potential irritants. Carpets should be vacuumed frequently. Cleaned cotton sheets should be used to cover the dog's bed.

### 2) Avoidance of strenuous exercise and collars

Gentle long walks are more indicated than fast short runs. Light exercise can assist in dislodging bronchial mucus and helps open small airways by promoting increased lung volumes associated with a standing position. A harness should be worn instead of a collar when the dog is walked on a lead.



### 3) Weight control

Fat tends to accumulate in the chest and reduce the lung volume. This can cause compression of the airways and stimulate cough. Weight reduction will improve respiration, exercise capacity, and cardiovascular functions with dramatic results. Please contact your local veterinarian for

cated on the table

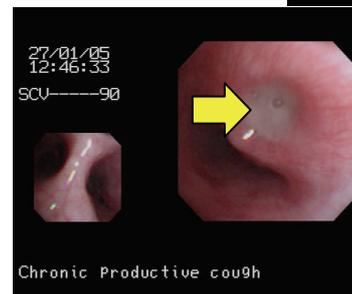
## Which dogs can be affected by Chronic Bronchitis?

All dogs can potentially develop CB. However there seems to be an increased prevalence in middle-aged to old-aged toy breeds, terriers, Labradors, Golden retrievers, Springer spaniels, and Cocker spaniels.

## How is CB diagnosed?

As in people, clinical diagnosis of CB requires fulfilment of 3 major criteria:

- 1-Chronic cough, for at least 2 consecutive months over the preceding year
- 2-Evidence of excessive mucus on bronchoscopy, which can appear in strands or plugs that can obstruct small airways, like in the example reported on the picture above (the yellow arrow points at a plug of mucus obstructing a bronchus)
- 3-Exclusion of other chronic respiratory diseases (e.g. bacterial pneumo-



nia, lung tumours, bronchial foreign bodies, aspiration pneumonia) Chest radiographs are also recommended to identify the extension of the disease and identify other abnormalities that may complicate the underlying CB (e.g. pneumonia).

## What is the treatment for CB?

Unfortunately, CB is an untreatable disease, due to the irreversible bronchial lesions. Treatment is aimed at controlling cough, relieving the airway obstruction and reducing the progression of the disease, as reported below.

advice on successful weight control.

### 4) Relief of airway obstruction

Nebulisations help bring up mucus from the lungs, bronchi, and trachea because it thins the mucus and lubricates the irritated respiratory tract. There are several nebulisers/humidifiers available in most health & beauty shops. However, you can also take your dog into the bathroom, close the door and turn on all of the hot water to create a steam bath, and letting your dog breath in the warm, moist vapours. During, or immediately after the steam bath, you can cup your hand and rapidly tap the dog's chest wall repeatedly for a couple of minutes, as shown on the picture (coupage). This loosens some of the deeper secretions and helps them move into the airways, causing cough that



will remove mucus from the chest. Nebulisation should be carried out for 10-15 minutes, at least twice daily.

### 5) Inhalation steroids

If the dog does not improve following the above conservative interventions, inhalation steroids can be considered. These drugs will act directly in the airways and reduce the local inflammation responsible for the excessive mucus production. Since inhaled steroids are not absorbed in the body, there are minimal side-effects observed. These drugs are given to the dog using a dedicated spacer, like the one shown in the picture on the left. These drugs need to be prescribed by your vet, who will also instruct you on how to use the spacer.



## What is the prognosis of CB?

Unfortunately CB disease tends to be progressive and deterioration depends on the severity of the bronchial lesions and the possibility of secondary bacterial infections. Cases that respond promptly to management carry a better prognosis.

*This handout provides a general overview on this topic and may not apply to all patients.*

*Please do not hesitate to contact us if you require any additional information. ([www.cardiospecialist.co.uk](http://www.cardiospecialist.co.uk))*





