Bronchopneumonia in the Irish Wolfhound

Essential Information for Primary Care Vets

Mark Dunning MA, VetMB, PhD, CertSAM, DipECVIM-CA, MRCVS
Professor of Small Animal internal medicine
and Angela Bodey BSc, BVSc, PhD, MRCVS,

Background

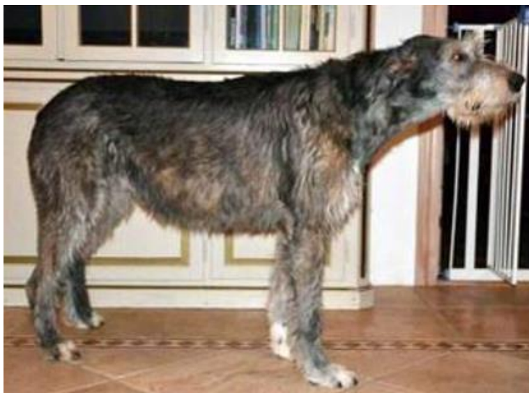
With the support of Mark Dunning and Angela Bodey, the Irish Wolfhound Health Group have developed this information sheet based on first-hand experience of bronchopneumonia in the breed. It aims to identify significant factors that influence the development and outcome of this condition, and, if possible, the most appropriate treatment.

Bronchopneumonia in Irish Wolfhounds is a severe and rapidly life-threatening condition which must be treated urgently. It often does not present with typical symptoms; thus, it is crucial to be aware of this to ensure timely intervention. In some cases, a dog will die because the condition is not recognized in time to treat it effectively. Standard treatments may not be enough to save the dog or prevent recurrence.

There are several publications about respiratory disease in Irish Wolfhounds and several postulated reasons why this might occur (Wilkinson 1969, Leisewitz et al 1997, Clercx et al 2003, Greenwell and Brain 2014, Bodey 2015). Information on recognizing bronchopneumonia and outcomes of individual dogs has been shared between breeders and owners for many years. However, it is possible that some vets have not have dealt with the condition in the breed before. Particulary if experienced breeders and owners are not amongst their clients.

We are collating cases in order to understand more about this condition. If you have come across such cases in the past, we would very much appreciate these being enrolled into the study. Dr. Bodey, is conducting the study and this can be accessed on our Bronchopneumonia page at http://www.iwhealthgroup.co.uk/pneumonia.html if you could spare a few minutes to complete it.

The information contained in these notes has been collated from outcomes of the many cases that we are aware of, and we hope it may be of value to both vets and owners. The goal of these is to go some way to help save the life of a Wolfhound. The intention is to highlight some of the subtle aspects of how these cases present which may help the attending clinician to place a greater emphasis on there being respiratory disease than may be immediately apparent.



Presenting signs of IWH bronchopneumonia

The Irish Wolfhound at the outset of bronchopneumonia presents a typical and recognisable stance with the head and neck outstretched. The eyes are preoccupied and dull, affected dogs are reluctant to lie down, particularly on their side. The photograph on the left was taken as soon as this dog became ill. Her key signs being breathing difficulties, being unable to lie down and a temperature of 40.2C. (although absence of a temperature in the early stages is not uncommon). It may be helpful to see videos of Wolfhounds presenting with bronchopneumonia symptoms and these can be accessed at:
https://www.iwhealthgroup.co.uk/pneumonia.html

- Classically, the dog's head is lowered, and the neck outstretched; whether standing or lying.
- Dogs may have a nasal discharge, a cough and are often inappetant.
- THE ABSENCE OF A COUGH DOES NOT RULE OUT BRONCHOPNEUMONIA.
- The dog is often reluctant or unable to lie on its side (trepopnoea).
- The dog may be pyrexic but in the early stages their temperature may be normal.
- Cases may progress rapidly from non-specific signs of lethargy and inappetence

The dilemmas of an IWH with bronchopneumonia

If your client is an experienced IWH owner/breeder, the chances are they have seen this condition before and will recognise it or are aware of it from other owners. They will realise that **time is of the essence**. We hope their experience with early identification will be of value to you. However, **critical delays** in recognising the condition **may occur when**:

- The owner is inexperienced and may not recognise the symptoms so the dog may have been ill for several days and already be in a critical condition.

© IWHG 2022

- The symptoms are atypical, therefore this condition is frequently overlooked as a differential due to the absence of overt clinical signs (particularly the absence of a cough), this condition is often mistaken for congestive heart failure.
- The symptoms come on very suddenly, frequently with no premonitory signs, perhaps just a lethargic dog with a temperature.
- The dogs may have both tachypnoea and dyspnoea, without audible changes on thoracic auscultation.

Challenges over diagnosing bronchopneumonia

- One problem in reaching an early diagnosis can be the lag between clinical signs and radiological changes.
- As with bronchopneumonia in any dog, normal or minimally abnormal radiographs at the time of presentation may be seen despite severe clinical signs.
- If suspicions for bronchopneumonia exist (see Clinical Signs) treatment should not be delayed; by which time the dog may be seriously ill, which increases the chance of mortality.
- Rapid referral of these cases has historically led to positive outcomes due to availability of advanced diagnostics including CT and endoscopy and 24-hour intensive care.

Challenges over treating bronchopneumonia

- The cause of this condition is frequently unknown and therefore treatment is often empiric based on the clinical signs.
- In many cases a bacterial cause is suspected however BALs have infrequently been performed to guide therapy.
- Therefore, empirical intravenous broadspectrum antibiotic therapy is a rational approach in the absence of BAL or culture results.
- From the evidence that has been gathered to date, antibiotics introduced as soon as possible seems to improve the likelihood of survival.
- A combination antibiotic approach seems most appropriate, although which antibiotics are the most efficacious are at present not defined (see Bodey 2015).
- Avoid long-acting or subcutaneous preparations and oral routes of administration in the acute states.
- Treatment for 4-6 weeks would be recommended as this condition can relapse and is frequently recurrent.
- Supportive care is also crucial and respiratory physiotherapy including coupage, nebulization and repeated turning are essential.
- The provision of supplemental oxygen is frequently necessary to maintain acceptable levels of oxygen saturation – this may need to be provided for sustained periods of time.
- Additional supportive treatment including fluid therapy and anti-inflammatory medications are also valuable.
- Assessment of metabolic changes particularly hypoglycaemia is essential.
- Hypoglycaemia can develop and is often overlooked, increasing the chance of mortality.

Challenges over timing of referral

- If a positive response to treatment is not seen within 24 hours, we would encourage speaking to a specialist or seeking referral, as time is of the essence

  Further information can be obtained from the

Download this guide using this QR Code

© IWHG 2022