



## **Pleural effusion**

The term **pleural effusion** describes a collection of fluid in the space between the lungs and the ribcage. The presence of this fluid prevents full expansion of the lungs with air, and thus makes breathing difficult.

### **Diagnosis**

Your vet may suspect a pleural effusion if your pet is having difficulty breathing. Breathing with the mouth open, a rapid breathing rate, and increased respiratory effort are all important clinical signs. However, a pleural effusion is not the only possible cause of breathing difficulties and your vet will need to run further tests to determine the cause of the problem. In most cases an X-ray of the chest is required.

### **Treatment**

If X-rays confirm that your pet has a pleural effusion, the next step is to drain this fluid away. Removal of the fluid will immediately make it easier for your pet to breathe. A sample of the fluid can then be analysed (this may be performed at the practice, or your vet may decide to send the sample to a specialist laboratory for more detailed examination).

Unfortunately draining the pleural fluid away is not without risk. The procedure involves introducing a needle into the pleural cavity in the chest. There is a small risk of trauma to a vessel causing bleeding and especially in cats additional stress can be risk when they are already struggling to breathe. Your vet will minimise the risks by providing supplementary oxygen and keeping stress to a minimum. In some cases it may be safest to sedate your pet first to minimise stress. Without treatment most pleural effusions are eventually fatal so it is usually agreed that the benefits of draining the fluid far outweigh the risks.

### **Causes of pleural effusion**

Your pet will find breathing much easier once the pleural fluid has been drained. However, it is essential to analyse the fluid to discover the cause of the pleural effusion – in most cases the pleural fluid will reform over the next few days if preventative treatment is not implemented.

Examples of the different causes of pleural effusion:

1. Trauma – after a fall or road accident blood may fill the pleural space. A similar situation may arise if there is a problem with the clotting system allowing internal bleeding
2. Infection – the pleural space may fill with inflammatory fluid if there is an infection in this area

3. Heart disease – if the heart is not beating efficiently fluid may accumulate in the pleural space
4. Viral infection – in cats infection with the FIP virus can lead to accumulation of fluid in the pleural space
5. Neoplasia – certain cancers of the lungs and pleura can produce excessive fluid

Analysis of the fluid will help your vet to distinguish between the different causes of a pleural effusion. Your vet can then advise you on the most suitable treatment for your pet (e.g. starting heart medication).

If the pleural fluid has to be sent away for analysis you may be advised to take your pet home to await the results if they are stable enough. If so, please keep them rested indoors and consult your vet without delay if their breathing deteriorates or you are concerned for any other reason.