



## COMPANION ANIMAL NEWSLETTER– JULY 2024

### PHNUEMOTHORAX CASE

In veterinary practice we see lots of emergency cases, with patients needing to be seen, assessed and treated in a short space of time, but it is also important to keep the routine cases running with as little hold up as possible! This requires a whole team approach and everyone working together to ensure the best outcomes for all of our patients and clients.

Below we give a little insight into how emergency cases are dealt with using a recent case as an example (with the owners' permission).

#### **Contact:**

The first point of contact for the client is usually via the reception team or out of hours receptionist (also a member of our team). The reception team have received training in triaging emergencies by asking pertinent questions to gain information for the vet, and then getting the patient seen as soon as possible. Either when the call comes in, if immediate clinical advice is required, or once the details have been taken and the client is on their way to the practice, the receptionist will alert the clinical team of the emergency estimated time of arrival and details of the case. This allows the team to prepare for the emergency situation; road traffic accident, a whelping bitch, a collapsed older animal, for example. These are all time critical but require different approaches and assessment. In the case we will look at here, a dog had been involved in an incident with a vehicle on farm. The dog had been in the back of a Gator, the hand-break had failed and the Gator rolled down a hill, hitting a wall at the bottom whilst the dog was in the back. The owner told the receptionist that the dog was having trouble breathing.

#### **Triage and Plan**

The first stage with any emergency is to perform a nose to tail assessment of the animal, covering the major organ systems and to identify what, if anything, poses the greatest threat to life. This is not always the most obvious, for example, a dog with a large wound and fracture to its leg looks very dramatic, but it may have internal bleeding which is hidden but much more cause for concern. In this case, the dog had a 2.5cm cut over her stifle (knee) which needs addressing, but the difficulty breathing poses an immediate threat to life and becomes the priority. On first examination, the dog had an increased respiratory rate and her lung sounds were muffled; listening to a chest you should be able to hear leaves rustling, in this case there was nothing. This indicated that there was something

between the lung and the body wall, in the pleural space. This could either be fluid or air. Once the full examination has taken place, discussion with the owner regarding treatment options, prognosis, and cost estimates, so that they can make an informed decision about the next steps is key.

#### **Work up**

In this case, the best ways to look into the dogs thorax were x-ray and ultrasound. The x-ray would show if there were any fractures to the spine; if any of the digestive tract is in the chest (diaphragmatic hernia); or if the lungs are compressed and there is fluid or air in the pleural space. The ultrasound gives us information if the pleura has air or fluid and where it is. In this case, there was air present. In this situation we believe that, when the Gator stopped suddenly, hitting the wall at the bottom of the slope, the dog's body also stopped suddenly, but the lungs kept moving inside the chest cavity, causing a tear in the lung tissue. This tear breaks the airtight seal of the lungs

and allows air to escape into the space around them. As the air is not in the lungs, it does not get breathed back out, this can then cause the lungs to compress reducing the amount of air intake and affecting the animal's breathing.

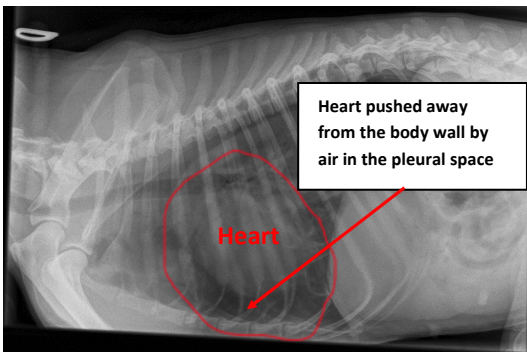
#### **Treatment**

The x-rays showed gas in the pleura but no fractures, confirmed by doing an ultrasound scan. As the dog was showing signs of pain and discomfort she was given IV sedation and pain relief, and the vet then performed a thoracocentesis. A thoracocentesis involves placing a catheter past the ribs, into the space between the body wall and lung, drawing off whatever is there, in this case air. By removing the air it allows the lungs to re-expand. The vet proceeded to take half a litre of air from each side. The dog's respiratory rate went from 60 breaths per minute to 30, and the ultrasound then showed that the lungs had re-expanded. Once the dog's breathing was stabilised, we could address the laceration on her knee. Recovery involved rest so that any clots which had formed on the burst bit of lung and were holding the air in place in the lung, would not be disrupted. Thoracocentesis was performed again the following day with less air being drawn from the pleural space.

#### **Long Term Care**

Once the vet was happy that the dog was stable, and the lung was not leaking air, we must allow time for healing to take place and a good seal to form in the lung. As she is a working Kelpie, this did not come naturally to her but two weeks down the line she was doing really well, her owners were pleased with her progress, she had brought in a small field of sheep, showing no ill effects!

Effective care relies on the whole team: Reception taking relevant information and passing it on to the clinical team, office staff processing insurance documents, nurses monitoring anaesthetic, providing welfare care and the vets to diagnose and treat. Here at Dalehead we have an excellent team who work seamlessly together providing the best care for your animals. We are here for you 24 hours a day, 365 days a year.



Heart pushed away from the body wall by air in the pleural space

Heart

# PYOMETRA IN CANINES

## What is a Pyometra?

A pyometra is a serious and life threatening infection within the uterus. Following oestrus (heat) progesterone levels remain elevated for several weeks which causes stimulation of the uterine lining to thicken in preparation for pregnancy. If pregnancy does not occur for several cycles, the lining increases in thickness until cysts form in the uterus. The thickened cystic lining then starts to secrete fluid which creates an ideal environment where bacteria can grow. Pyometra may occur in any intact young to middle aged bitches, however is more common in older bitches.

## Clinical signs

The clinical signs depend on whether the cervix remains open. If the cervix is open a foul smelling purulent discharge will drain from the uterus and through the vagina. The discharge can be observed on the skin or the hair under the tail, this can also be seen on bedding or furniture where the dog has recently been laid. A fever, lethargy, depression or anorexia may or may not be present.

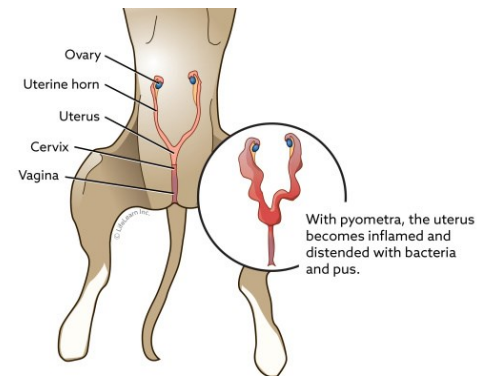
If the cervix is closed the discharge that forms cannot be drained, this collects within the uterus causing distension of the abdomen. This can be fatal for the animal as the bacteria releases toxins which are then absorbed into the blood stream. Dogs with a closed pyometra can become ill very quickly. Animals with a closed pyometra can become anorexic (will not eat), listless, have increased thirst, vomiting and diarrhoea may also be present.

## How is a Pyometra treated?

The preferred treatment is to surgically remove the uterus and ovaries by performing an ovariohysterectomy (spay). Dogs diagnosed in the early stage of the disease are very good surgical candidates. The pyometra surgery is somewhat more complicated than a routine spay at this stage. However, most dogs are diagnosed when they are quite ill, resulting in a more complicated surgical procedure and a longer period of hospitalisation. Intravenous fluids are required to stabilise the dog before and after surgery. Antibiotics are usually dispensed post operation.

## What happens if a Pyometra is not treated?

The chance of successful resolution without surgery or prostaglandin treatment is extremely low. If treatment is not performed quickly, the toxic effects from the bacteria will be fatal in many cases. If the cervix is closed, the uterus can rupture, spilling the infection into the abdominal cavity, which is fatal. A pyometra is a serious medical condition that requires prompt treatment.



## FUN FACTS ABOUT GUINEA PIGS

1. Guinea pigs' teeth NEVER stop growing so feeding them a varied, fresh, healthy diet is key to keeping those teeth in good working order!
2. Guinea pig babies are fully developed when they are born, they can start running around the same day they are born.
3. Guinea pigs have 4 toes on the front feet and 3 toes on the back feet.
4. POPCORNING – this is when they are excited and happy. They jump and twist around.
5. They are very sociable and chatty little animals and are best living in pairs, not alone.
6. The lifespan of a guinea pig is around 5-7years (but some can live longer).
7. **Guinea pigs need a high fibre diet** supplemented with vitamin C, as they lack the enzyme needed to synthesise vitamin C and can only store it for short periods of time. Also, make sure they are getting fed the correct diet for their age as each age group has different needs.
8. **Guinea pigs can be active up to 20 hours per day**, and sleep for very short periods of time, so make sure they have lots to explore and play with.
9. Guinea pigs need well-maintained coats to be happy and healthy, so you'll need to groom them regularly, long-haired breeds need grooming everyday.
10. Guinea pigs makes wonderful little noises, this is called wheeking or squealing it sounds like a long, high-pitched whistle, or squeal, this usually means they are very excited.



**If you are thinking of getting a guinea pig or have one that we have never seen before we would love to welcome you for a Meet and Greet appointment at the surgery.**



Check out our website [www.daleheadvetgroup.co.uk](http://www.daleheadvetgroup.co.uk) for more information about caring for your pet, special offers,

