

Winter Newsletter 2015

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Opening Hours

Monday - Friday 8.00am - 6.00pm

Saturday 8.30am - 12.30pm

> Sunday Closed -

Public Holidays Closed

Polar bears

- Latin name Ursus maritimus.
- Have a double hair coat, thick layers of body fat and furry feet to keep warm. Suffer more from heat exposure than cold.
- Live in Arctic countries (Alaska-USA, Canada, Russia, Greenland, and Norway)
- Live for 15-18 years in the wild and up to 40 years in captivity
- Weigh 300-600kg as an adult.
- Eat mainly seal blubber, usually leaving the rest of the carcass for other scavengers.
- The major threat to Polar bears is climate change decreasing their habitat and food sources (seals).
- Are at the top of the food chain so are also at risk from accumulated toxins, such as DDT (some of these chemicals become more concentrated the further up the food chain you go as they can't be eliminated from the body easily)
- Thought to have evolved from brown bears 300,000-6 million years ago



One of the most important roles of red blood cells in the body is to carry oxygen. This means aneamic dogs and cats lack oxygen. If your think your pet may have IMHA keep them as quiet as possible as stress can be fatal in these cases!

Many other diseases cause anaemia, so just because your pet has anaemia does not mean they have IMHA. Other causes include rat baits, bleeding, some parasites, and internal disease such as cancer.

Immune mediated haemolytic anaemia

Immune mediated haemolytic anaemia (IMHA) is a life threatening, though uncommon, disease of dogs and cats. The disease is caused by an error in the immune system in which the body destroys its own red blood cells. In a normal animals body the immune system is very good at recognizing self, from non-self. Non-self (normally foreign materials such as bacteria, viruses and parasites) are removed. The body does this by creating antibodies. These are small proteins that stick to very specific foreign materials. They then act like a light beacon telling the rest of the immune system (white blood cells) to destroy whatever they are attached to.

Problems arise when an antibody is produced to a foreign protein that is very similar to a protein already found in the body: in the case of IMHA a protein on the surface of red blood cells. Imagine two twins one of whom is a nasty criminal. The police have a photo and arrest two suspects based on a photo, and put them in gaol. They may have got rid of a threat to society, but have also arrested an innocent person in the process. That in effect is IMHA.

What causes IMHA?

70% of the time we don't know. In fact it rarely affects how we treat the disease but can help with getting an early diagnosis. Many drug therapies (in fact almost any drug) can provide the protein that causes confusion, as can some parasites, bacterial or viral infections, and certain types of cancer. Some dogs are genetically predisposed to develop the disease. A history of recent drug therapy, travel (to areas they may contract blood borne parasites), or signs of infection can all be important. In cats the disease is most commonly associated with viral infection. In older dogs the risk of a predisposing cancer increases significantly.

What happens to my pet?

In IMHA the blood cells are destroyed not lost, so you don't see signs of bleeding. However your pet will become anaemic. They will become weak, often very thirsty and appear unwell. Their gums will become pale/white or yellow (called jaundiced or icteric). Red blood cells primarily carry oxygen around the body. As such when they are lost the body has a lack of oxygen. As the disease progresses the affected animal becomes more and more lethargic, ultimately leading to coma, and death.

Diagnosis is based on a combination of history, blood tests and a process of elimination. A blood screen will generally show signs of a regenerative anaemia (the body is making lots of red blood cells but they are being destroyed). Specific markers highly indicative of IMHA may also be seen. No test however is fool proof. This regenerative process takes a few days to kick in, so if your pet is in the early stages of the disease it may not be obvious. A coombes test can be helpful, but unfortunately can be confusing as in dogs with IMHA it can sometimes be negative, and positive in dogs without the disease. In the end the diagnosis is usually determined by clinical experience and a high index of suspicion. Other diagnostic tests that can be helpful are x-ray and ultrasound (usually looking for tumours), and a bone marrow aspirate. In cats testing for viral disease is a normal part of the diagnostic process.

Can it be treated?

Yes, though it is a very serious disease and not all patients will survive.

Firstly if a cause can be identified, or suspected, it should be treated or removed where possible. This can usually be done with medications and parasites, may be possible with cancers, but is usually not possible with viral disease.

The immune system then needs to be shut down to stop the problematic antibodies form being produced. Most commonly this is done using a drug called prednisolone (a form of cortisone). Other drugs that may be used are azathioprim, cyclophosphamide and cyclosporine amongst others. This latter group are generally slower to act than prednisolone, but can be better options for long term control of the disease. Even so the prednisolone is likely to take 3-7 days before an increase in the number of red blood cells is seen.

Other than that we rely on supportive care. Though we try to avoid it one, or a number, of blood transfusions may be required to keep your pet alive for long enough for the other medications to work. You should expect your pet to be in hospital for a week or more whilst the disease is controlled.

What happens in the long term?

If the initial treatment is successful then your pet will be stabilized on medication. If an underlying cause has been found and eliminated then medication may be withdrawn relatively quickly. Otherwise we will try to gradually withdraw medications over a period of months to years. Some pets will stay on some medication for life whilst others may come off all medications. In either case animals can lead a happy and normal life once they pass the acute life threating early stages of the disease. With or without ongoing medication the disease may recur, particularly if a cause was never found.





Letting the cat out of the bag: and pet pigs.

This expression appears to have first appeared in England in the mid 1750's.

The most likely origin is as follows. Farmers on market day would take piglets to town in a hesian sack and proceed to sell them.

Some times they would try to place cats in the bag in lieu of piglets. If the trick was foiled and one of the cats escaped they would have revealed their secret and 'the cat had been let out of the bag'.

Cats have been an important animal, often of mythical proportions for thousands of years.

The emergence of pigs as pets, however, is a relatively recent phenomena.

Tea cup pigs, and Vietnamese pot bellied pigs are both kept as pets. However the tea cup or juliana pig is really just a baby pig of a smaller breed, which will grow to be quite large (30-50kg). The Vietnamese pot bellied pig weighs about 60kg as an adult, so is not a small pet either.

Pigs have been a useful domesticated animal, for purposes other than food. Trained pigs are used to locate truffles up to 3 feet underground. It is thought the truffle smells like a pig pheromone.

Pigs are also important in literature including, Miss Piggy, Babe, Piglet (Winnie the Pooh), and Wilbur (Charlotte's web): to name but a few.



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