

Immune Mediated Haemolytic Anaemia (IMHA)

What is IMHA?

IMHA is a condition where the body's immune system attacks and destroys its own red blood cells causing anaemia. Red blood cells deliver oxygen around the body and severe anaemia can mean poor oxygen delivery to organs such as the kidneys, brain, liver and others, causing damage. It affects both cats and dogs with some breeds being predisposed such as the Springer Spaniel.

Secondary IMHA can be caused by an underlying trigger e.g. some infectious agents like tick borne diseases, tumours, some medications, toxin ingestion and other conditions. If there is no underlying cause (which is the most common form) detected it is called 'primary' IMHA.

What are the clinical symptoms?

Symptoms will vary on how severe the disease is. In mild cases or early stages, you may notice that your pet is just more lethargic than usual or inappetent. In severe cases, the patient can collapse and have difficulty breathing due to anaemia or the formation of blood clots (stroke). This is usually accompanied by pale gums, and you may see a yellow (jaundiced) tinge to the skin, whites of the eyes and gums caused by bilirubin. This may also cause the urine to be a more orangy yellow than usual, or if a severe attack is happening then red urine can also be seen. Sometimes a fever may be present.

Diagnosis

IMHA is diagnosed using a combination of blood tests and diagnostic imaging which may be radiographs and abdominal ultrasound or a computed tomography (CT) scan to search for any underlying triggers. Primary IMHA is diagnosed only when other causes are ruled. In some cases, a bone marrow biopsy may be obtained.

Treatment

If there is an underlying cause identified, then treatment for this is started. Cases of primary IMHA are treated by suppressing the immune system, initially using steroids. Additional immunosuppressive medication may be added to get an additional immunosuppressive effect or to help dogs that do not tolerate high doses of steroids very well. Dogs with primary IMHA are at risk of developing blood clots so medication is often started to try and lower this risk. In severely anaemic animals blood transfusions are often necessary to help improve oxygen delivery to the body in the short term. Sometimes blood transfusions can be rejected by the patient (known as a transfusion reaction), or the red blood cells broken down quickly due to the IMHA. Normally, these reactions are mild and can be managed with supportive care but very rarely a severe reaction can be seen.

Prognosis

The prognosis when there is an underlying cause will depend on what the cause is. Infectious causes are very treatable, but some cancers do unfortunately carry a poor

outlook. The prognosis for primary IMHA is variable. Unfortunately, either due to severity of disease or its complications, IMHA can be life threatening and despite treatment some animals will not survive; usually we will know this within the first 7- 14 days after diagnosis as animals that do not do well often do not survive to hospital discharge. Dogs and cats that respond to immunosuppressive medication can do well and often can be weaned off treatment gradually although there is a risk they may relapse later in life (this could be weeks, months or years later or sometimes never). Only about 15% of dogs/ cats are thought to relapse after an initial promising response and disease control.