Southfields
veterinary specialists

INTERNAL MEDICINE

IMMUNE MEDIATED HAEMOLYTIC ANAEMIA

(IMHA)

What is IMHA?

It is a condition caused by the immune system attacking and damaging red blood cells, which results in anaemia. The immune system should not normally attack red blood cells but this attack can be triggered by many factors including infection, cancer and drugs. Some patients develop immune mediated haemolytic anaemia (IMHA) without identifiable underlying cause and genetics could contribute to the development of IMHA in these patients. IMHA is more common in dogs than cats, and dog breeds such as Cocker Spaniels, Springer Spaniels, Miniature Schnauzer, Poodles and Old English Sheepdogs.

What are the clinical signs?

Many clinical signs result from moderate to severe anaemia. Other clinical signs are caused by activation of the immune-system which can cause fever, and dogs with IMHA have an increased risk of forming blood clots which can lodge within organs such as the brain and lungs. Symptoms can vary from mild signs to severe life-threatening disease:

+ Lethargy and reduced activity
+ Reduced appetite
+ Increased breathing rate
+ Increased heart rate
+ Pale gums or jaundiced gums
+ Collapse
+ Discoloured urine (either red / dark brown / orange)

Diagnosis

Patient history and physical examination findings which are suggestive of IMHA are the initial stages of investigation. Blood, urine and diagnostic imaging tests (such as ultrasound, X-ray and CT scanning) are used to determine the severity of anaemia and investigate possible underlying triggers for IMHA such as focus of infection, inflammation or cancer. Sometimes bone marrow samples are also needed to obtain a diagnosis.

Treatment

The treatment of IMHA requires suppression of the overactive immune system and treatment of the inciting cause if one is identified. Steroids are the first line treatment to suppress the immune system, and additional medications may also be needed (drugs such as ciclosporin, azathioprine, mycophenolate and leflunomide). Most dogs require a treatment course, which typically lasts between four and six months although some dogs cannot be weaned off medications. Typically, treatment starts with high doses of these medications, which are gradually weaned when remission is achieved. Monitoring blood tests are often taken every two to four weeks during this time.

Anti-clotting medication is commonly prescribed to reduce the likelihood of abnormal blood clot formation. If the destruction of red blood cells results is a marked anaemia, then one or more blood transfusions may be needed.

Prognosis

There are many factors which influence the prognosis of patients with IMHA, with most being associated with the severity of anaemia, inflammation and immune system attack. The overall prognosis is very variable, with reports ranging from 34 to 88% of pets being discharged from hospital after initial diagnosis. Despite recent medical advances which have improved the outcomes of patients with IMHA, if a patient dies because of their IMHA then it is typically occurs within the first two weeks following diagnosis. Following discharge from hospital and when the condition is stable, patients typically have a good prognosis.

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