Systemic Lupus Erythematosus

ABOUT THE DIAGNOSIS

Systemic lupus erythematosus (SLE, "lupus") is an autoimmune disease that can affect multiple body systems. Normally, the immune system attacks germs or foreign substances that invade the body. Autoimmune diseases occur when the immune system mistakenly attacks parts of the body. In SLE, multiple body tissues are targeted by the immune system. Susceptibility to developing SLE appears to be genetically determined, but environmental factors seem to trigger the onset of the disease. Some medications can trigger a disease similar to SLE. The role of environmental factors in the development of SLE remains under investigation. Overall, the features of SLE are very similar, and sometimes identical, to lupus in humans.

Symptoms can be extremely variable, and SLE is sometimes referred to as "the great impostor" because of the wide spectrum of symptoms it may cause. Symptoms vary depending upon the body systems affected. The joints, kidneys, and skin are often involved. Other systems, including the muscles, nervous system, heart, and lungs can also be affected. Affected pets may have a chronic fever, stiff gait or limping (lameness), joint swelling, weakness, skin changes, ulcers in the mouth, increased drinking and urination, and behavioral changes.

Diagnosis: There is no single definitive test for SLE. Diagnosis depends upon the presence of several of the symptoms listed above plus a series of suggestive findings on laboratory tests. Routine blood tests may reveal anemia (too few red blood cells) and changes in the white blood cell count. Kidney problems are often present as part of SLE, and hints of this may be detected on routine blood tests and urinalysis. Skin biopsies may support the diagnosis of autoimmune disease. A test to detect a type of antibody produced in SLE, the antinuclear antibody (ANA) titer, may give more evidence of the disease. However, both false positive and false negative results are possible. Weighing the combination of symptoms and laboratory tests results is involved in making a diagnosis of SLE.

LIVING WITH THE DIAGNOSIS

Pets with SLE can usually be managed but they cannot be cured. Symptoms often improve or even disappear with treatment, but relapses can occur. Laboratory testing should be repeated every few months to monitor for relapses and to assess the status of vital organs that could be affected by SLE. The disease is a serious one, and not all affected dogs will respond to treatment.

TREATMENT

Treatment depends upon the severity of the disease in your pet. Lameness (limping) due to arthritis can be controlled by prescription antiinflammatory medications (do not use over-the-counter medications meant for people). More severe signs require the administration of corticosteroids, such as prednisone. Corticosteroids have many potential side effects, so their use should be monitored by your veterinarian. If your pet does not tolerate corticosteroid therapy or if the disease is severe, other types of immunosuppressive therapy is indicated. This allows lower dosages of corticosteroids and control of severe or persistent symptoms. Azathioprine is most often used in dogs; chlorambucil is frequently chosen for cats. After your pet's disease is controlled and the symptoms are reduced or resolved, the dosage of the drugs used will be gradually tapered to the lowest effective level.

DOs

- Realize that no single test is conclusive for lupus and that the diagnosis requires several diagnostic tests for confirmation.
- Keep your pet from excessive exposure to sunlight if he or she has SLE, since ultraviolet radiation may make the condition worse, especially with skin lesions.
- Give all medications exactly as instructed, and contact your veterinarian before making any changes if you have medication-related concerns. Be sure to get refills of drugs in time so that your pet will not run out.
- Consider having a second opinion from a veterinary internal medicine specialist if the cause or treatment remains unclear, or for the latest treatment options. Your veterinarian can refer you to one of these specialists (directory: www.acvim.org or www.vetspecialists.com [North America], www.ecvim-ca.org [Europe]).

DON'Ts

- Don't stop medication or lower the dose without consulting your veterinarian, as this can be dangerous.

WHEN TO CALL YOUR VETERINARIAN

- If you notice any of the medication side effects listed under Signs to Watch For.

SIGNS TO WATCH FOR

- Corticosteroids can cause a variety of side effects including panting, increased appetite, increased drinking and urination, and temperament changes. These are to be expected. However, if these are unbearable, or for side effects that are more significant including loss of muscle mass around the head and face, decreased appetite, and sluggishness or inactivity (compared to normal), a consultation with your veterinarian is warranted.
- Side effects of immunosuppressive agents can result in vomiting, lack of appetite, inactivity, and infections.

ROUTINE FOLLOW-UP

- Frequent checkups are required at first to monitor the effectiveness of treatment and to screen for side effects of treatment as a precaution. Corticosteroid therapy and immunosuppressive drugs can potentially cause a variety of side effects. Routine blood

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tests and analysis of urine samples are necessary to look for problems such as bone marrow suppression, resulting in anemia and lowered resistance to infection. Immunosuppressive drugs such as azathioprine or chlorambucil may cause bone marrow suppression. Inapparent infections, such as urinary tract infections, may occur, so periodic testing is necessary to minimize the risk of more severe or generalized infections. After your pet's disease is under control, regular rechecks are helpful in early detection of disease flare-ups.

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