

Diagnosis and Management of Systemic Lupus Erythematosus

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DESCRIPTION

Systemic Lupus Erythematosus (SLE) most commonly affects women, especially during their reproductive years, although it can also occur in men, children, and older adults. The disease typically follows a pattern of flares and remissions. A flare refers to a period when symptoms become more active or severe, while remission refers to a period when symptoms are reduced or controlled. The unpredictable nature of the disease makes both diagnosis and management challenging.

Diagnosis of SLE is not based on a single test. Instead, it requires a combination of clinical evaluation, laboratory investigations, and exclusion of other similar conditions. Doctors begin by taking a detailed medical history and performing a physical examination. They look for symptoms such as joint pain and swelling, persistent fatigue, skin rashes (especially the butterfly rash on the face), mouth ulcers, photosensitivity, hair loss, fever, and signs of organ involvement.

Laboratory tests play an important role in supporting the diagnosis. One of the most commonly used tests is the Antinuclear Antibody (ANA) test. A positive ANA test is seen in most people with SLE, but it is not specific because it can also be positive in other autoimmune diseases and even in some healthy individuals. Therefore, additional antibody tests are needed for confirmation. These include Anti-double-Stranded gene (anti-ds) antibodies and anti-Smith (anti-Sm) antibodies, which are more specific to lupus. Other tests such as antiphospholipid antibodies may help identify risks of blood clots and pregnancy complications.

Routine blood tests often show anemia, low white blood cell count, or low platelet count. Complement levels may also be reduced during active disease. Urine tests are essential to detect kidney involvement, which is known as lupus nephritis. If kidney disease is suspected, further evaluation such as a kidney biopsy may be required to determine the severity and guide treatment.

Because lupus symptoms overlap with many other conditions, doctors often use classification criteria that combine clinical symptoms and laboratory findings to help confirm the diagnosis.

Even with these tools, early diagnosis can be difficult, and some patients may take months or years before receiving a clear diagnosis.

Once SLE is diagnosed, management focuses on controlling symptoms, preventing organ damage, and improving quality of life. Treatment is individualized based on the severity of the disease and the organs affected. There is no permanent cure for lupus, but modern treatments allow most patients to control the disease effectively.

The foundation of treatment includes medications. Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) are often used to relieve mild joint pain and inflammation. Antimalarial drugs such as hydroxychloroquine are considered essential in most patients because they help reduce flares, control skin and joint symptoms, and improve long-term outcomes. Corticosteroids are used to control more severe inflammation or acute flares, but long-term use is limited due to side effects such as weight gain, bone loss, and increased infection risk.

For moderate to severe disease, immunosuppressive medications may be required. These include drugs such as azathioprine, mycophenolate mofetil, methotrexate, and cyclophosphamide. These medications work by suppressing the overactive immune response that causes tissue damage. In recent years, biologic therapies have also become available, targeting specific parts of the immune system and offering new options for patients do not respond well to traditional treatments.

Lupus nephritis, or kidney involvement, is one of the most serious complications of SLE. It requires early detection and aggressive treatment to prevent kidney failure. Management typically includes strong immunosuppressive therapy, blood pressure control, and close monitoring of kidney function. In some cases, a kidney biopsy is necessary to guide treatment decisions.

Along with medication, lifestyle management is a key part of controlling SLE. Sun protection is very important because ultraviolet light can trigger disease flares and worsen skin symptoms. Patients are advised to use sunscreen regularly, wear protective clothing, and avoid direct sunlight during peak hours.

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Received: 19-May-2025, Manuscript No. LOA-25-42189; **Editor assigned:** 21-May-2025, PreQC No. LOA-25-42189 (PQ); **Reviewed:** 04-Jun-2025, QC No. LOA-25-42189; **Revised:** 11-Jun-2025, Manuscript No. LOA-25-42189 (R); **Published:** 18-Jun-2025, DOI: 10.35248/2684-1630.25.10.343

Citation: Silva M (2025). Diagnosis and Management of Systemic Lupus Erythematosus. Lupus: Open Access. 10:343.

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A healthy diet supports overall health and helps reduce complications. While no specific diet cures lupus, a balanced intake of fruits, vegetables, whole grains, lean proteins, and healthy fats is recommended. Limiting processed foods and maintaining adequate calcium and vitamin D intake is important for bone health, especially for patients taking steroids.

Regular physical activity helps maintain joint flexibility, muscle strength, and overall well-being. Low-impact exercises such as walking, swimming, yoga, and stretching are often suitable. However, activity levels should be adjusted based on disease activity, and rest is important during flares.

Stress management is also important because emotional stress can worsen symptoms. Techniques such as meditation, breathing exercises, adequate sleep, counseling, and social support can help patients cope better with the disease.

Long-term care involves regular monitoring through blood tests, urine tests, and clinical evaluations. This helps detect flares early, adjust medications, and prevent complications. Patients taking hydroxychloroquine require regular eye examinations, and those on immunosuppressive drugs need monitoring for infections and other side effects. Preventive care, including vaccinations and routine health screenings, is also important.

CONCLUSION

In conclusion, SLE is a complex autoimmune disease that requires careful diagnosis and lifelong management. Although it has no cure, early detection, appropriate medication, lifestyle changes, and regular monitoring allow most patients to live active and productive lives. Advances in treatment continue to improve outcomes and offer better control of this chronic condition.