

## Systemic Lupus Erythematosus (SLE) Interventions

Systemic lupus erythematosus (SLE) is an autoimmune disease that activates the inflammatory response and damages healthy tissue and organs. This multisystem inflammatory disorder especially affects the skin, joints, and kidneys (refer to the Picmonic on "Systemic Lupus Erythematosus (SLE) Assessment"). Important treatment considerations include instructing the patient to avoid sunlight, monitoring for renal failure, and providing pain management. Drug therapy may include NSAIDs, glucocorticoids, methotrexate immunosuppressants, azathioprine (Imuran), and hydroxychloroquine (Plaquenil). For patients with SLE, the major concern is managing symptoms and preventing complications of treatments.



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### Avoid Sunlight

#### Avoid-sign Sunlight

In SLE, immune complexes tend to deposit in areas such as the skin and cause photosensitivity and severe skin reactions. Since cutaneous vascular lesions are most likely to appear in sun-exposed area, instruct the patient to avoid sunlight in order to minimize the development of lesions.

### Drug Therapy

#### Glucocorticoids

##### Glue-quarter-on-steroids

The administration of glucocorticoids should be limited to minimize side effects (refer to the Picmonic on "Prednisone (Glucocorticoids)"). However, patients with exacerbations of polyarthritis may benefit from tapering doses of IV methylprednisolone. Glucocorticoids are usually administered in patients with SLE experiencing renal failure.

#### Methotrexate

##### Moth-T-Rex-ate

Methotrexate immunosuppressants may be administered to decrease the need for long-term corticosteroid therapy. Examples of methotrexate immunosuppressants include cyclophosphamide, methotrexate, azathioprine, and mycophenolate. Azathioprine or cyclophosphamide may also be used to treat severe organ-system disease such as lupus nephritis. Since these drugs may cause toxicity and side effects, monitoring the patient is critical to prevent complications.

#### NSAIDs

##### N-sad

Pain associated with SLE may be relieved with NSAIDs (refer to the Picmonic on "Ibuprofen (NSAIDs)"). Patients with mild polyarthralgias or polyarthritis may especially benefit from these medications that impair prostaglandin synthesis. NSAIDs may also impair renal blood flow. Since prolong therapy is likely, monitoring the patient is critical to determine the presence of GI and renal effects.

#### Hydroxychloroquine

##### Hydra-color-queen

Antimalarial agents such as hydroxychloroquine and chloroquine may be used to help treat fatigue, alleviate moderate skin and joint issues, and prevent symptom flare-ups. However, symptom relief may take a few months. Since high doses of the medications may cause retinopathy and eye damage, instruct the patient to schedule appointments with an ophthalmologist every 6 to 12 months. Anti-leprosy drugs such as dapsone may be

used to manage cutaneous effects if the patient cannot tolerate antimalarial agents.

### **Azathioprine**

[Ass-prince](#)

Instead of long-term corticosteroid therapy, azathioprine is an immunosuppressant that may be used to help alleviate the symptoms of SLE. The drug may also be used to help treat severe organ-system disease such as lupus nephritis. It is important to monitor the patient for symptoms of drug toxicity and side effects while administering azathioprine.

## **Considerations**

### **Monitor for Renal Failure (ARF)**

[Monitor Dead Kidney](#)

Since acute renal failure is the most common SLE-related cause of death, monitoring the patient's kidney status is critical to determine renal involvement. Manifestations of renal involvement appear within 5 years after other symptoms of SLE appear. The degree varies from mild proteinuria to rapidly progressive glomerulonephritis. Since scarring may lead to end-stage kidney disease, the primary goal of patients with lupus nephritis is to preserve renal function and slow the progression of nephropathy.

### **Manage Pain**

[Pain-pill-hero](#)

The immune complexes associated with SLE may deposit into the joints and cause diffuse swelling and stiffness. The patient may experience severe joint and muscle pain. Medications such as NSAIDs may be administered to provide pain relief.