

# Systemic Lupus Erythematosus

**Author: MOHAMMAD SHIGUFTATASKEEN M.Sc.Microbiology, KMPG College,  
Khammam.**

## 1.ABSRTACT

Systemic lupus erythematosus (SLE) is a worldwide chronic autoimmune disease which may affect every organ and tissue. Genetic predisposition, environmental triggers, and the hormonal milieu, interplay in disease development and activity.

## 2.INTRODUCTION

Systemic Lupus Erythematosus(SLE) is an auto immune connective tissue disease. This disease occurs with specific antinuclear antibodies. SLE is recognized as one of the most prominent rheumatic diseases and it is a multi-system autoimmune syndrome.

Many studies found that the interaction between aquired factors and congenital factors responsible for excessive production of autoantibodies. These autoantibodies react with autoantigens forming immune complexes, with in the human body. Such immune complexes effects various organs like joints, skin, blood vessels, etc., resulting in multi-system damage or we can say multi-organ dysfunction. Also the cytokine dysregulation( especially type 1 interferon) and impaired clearance of dead cells leads to cause SLE.

## CAUSES

Because of diverse clinical manifestations, researchers aren't able to rule out whether lupus represents multiple diseases with final common pathway leading to disease or else other diseases leads to SLE. Both these conditions remains some controversy among researchers.



While the exact cause of SLE is unknown, research suggest a complex interplay of genetic predisposition, environmental factors like sun light exposure, infections, certain medications and hormonal fluctuations.

## SYMPTOMS

Lupus initially may appear as extreme tiredness, fatigue, malaise, loss of appetite, fever and weight loss in some cases. Most patients suffering from Lupus also complaints about joint pains and muscle pains. SLE is also responsible for skin problems especially causing red rashes on cheeks and bridge of the nose, such rashes are also called as “ Butterfly-Rash” due to its physiological appearance.



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SLE characterized to significant complications like lupus nephritis, cardio-vascular diseases and neuropsychiatric disorders. To improve patient outcomes, research aims to understand the forecasting of disease and manage complications.

### FREQUENCY

Systemic Lupus Erythematosus has been effected over 1.5 million people in United States., The exact prevalence is yet undetermined due to its diverse symptoms. Females develop lupus about nine times more than males.

### TREATMENT

There is no cure or specific medication for lupus, but one can manage by opting multi-drug therapy. Based on individuals specific disease manifestations and genetic profile, research is exploring diverse approaches for treatment. Current treatment involves immunosuppressants and anti-inflammatory drugs. Researchers focusing on developing more targeted therapies that specifically addresses the cause and the underlying immune dysregulation in Systemic Lupus Erythematosus.

### 3. CONCLUSIONS

Systemic Lupus Erythematosus is a rheumatic autoimmune disorder which is a life-threatening condition, this disorder can cause flare-up's and remission periods in patients. One can manage the flare-up's of this disease by understanding and monitoring its complications. Also people with SLE can lead a happy life by maintaining healthy life-style.

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