# Systemic Lupus Erythematosus [SLE]

**What is the main cause of SLE ?**

- Main reason of Lupus is body's altered immune system. White blood cells are main component of immune system. Many types of white blood cells are present in body. Lymphocytes is one of them. There are 2 types of lymphocytes. B-cell and T-cell. B-cell makes antibodies. Due to altered immune system many antibodies attacks our own tissue/cells. It is called Auto-Antibody. It causes damage to the organs and Lupus type of diseases develops.
- Virus, Bacteria, Hormonal Imbalance, Ultraviolet Rays are suspected to have role in this disease development and progress.

**What are the symptoms of SLE ?**

Symptoms depends on which organ system is affected.

- Joints: Pain and swelling in joints.
- Skin: Rash on face/ body, ulcers in mouth, loss of hair
- Blood: Reduction in various blood counts, bleeding from Ear/Nose/Urine.
- Lungs: Chest pain, breathlessness, cough.
- Heart : Chest pain, palpitations, breathlessness.
- Kidney : Swelling over face/ feet, breathlessness, hypertension at young age.
- Muscle : Muscle weakness.
- Brain: Paralysis at young age, psychological symptoms, tingling and numbness.
- Vascular(Blood vessels): Inflammation of blood vessels (Vasculitis) presents as gangrene, blackening of fingers/ toes.
- General symptoms including intermittent fever, weakness, decreased appetite, weight loss can also occur.

**Who can develop SLE ?**

- More than 90% of the patients are females. Usually this disease start at the age of 20-30 years.

**How can SLE is diagnosed ?**

- For definite diagnosis patient should have more then 4 symptoms. Blood tests are not the key factor for diagnosis.

**What types of tests are needed ?**

Two types of tests are usually advised.

- For diagnosis of organ involvement.
- For diagnosis of involvement and disturbances of immune system.

**What types of medicines are used for treatment?**

Different types of drugs can be used which are advised according to disease severity and organ involvement.

- Hydroxychloroquine/Chloroquine:- These drugs are used in every patient of lupus. It helps in controlling the disease.
- Steroids:- These drugs are used according to organ involvement and severity of disease. Minimum maintenance dose is used after control of disease is achieved. All measures are taken to prevent its side effects.
- Methotraxate, Leflunomide:- These types of drugs are used when disease activity is not very high and minimal organ afffection is present. These medicines helps to control disturbed immune system.
- Cyclophosphamide, Mycophenolate, Azathioprine:- It is used when disease activity is very high and major organs are affected.
- Rituximab, Belimumab, IvIg:- These type of medicines are used in severe life threatening disease and in resistant cases not improved by above drugs.
- Calcium, vitamin D, drugs to prevent Osteoporosis are also advised according to requirement.
- Vaccination against Pneumococcus bacteria, Influenza virus and other infections are also advised in susceptible patients.
- Drugs to prevent blood clot/Blood thinner (Aspirin,Warfarin) are used in patients with frequent miscarriages/abortions, gangrene, stroke etc.



**Is the treatment similar for all patients ?**

- No. Treatment is advised to all patients according to their disease severity and organ involvement. Treatment is modified according to increase or decrease in disease process.
- Regular blood monitoring is required to look for side effects of drugs even if disease is under control.

**What is the duration of treatment ?**

- Some medicines are required lifelong in these patients.

**Can Lupus be life-threatening disease?**

- Yes, if it is affecting body's main organs.

**Is Lupus familial disease ?**

- No, it is not familial in most patients.

**Dietary advise ?**

- Patient should take easily digestable food. Initialy they should avoid oily, spicy food. Patient can take sour food. There is no relation of disease activity with sour food.

**Can lupus remain in complete control ?**

- Yes. With regular appropriate treatment under observation/advice of Rheumatologist disease can remain in control. Patient can live as a normal person with treatment. Females can have pregnancy after control of disease.