# picmonic

# Systemic Lupus Erythematosus (SLE) Mechanism, Treatment and Complications

SLE is an autoimmune disease that affects multiple systems, and particularly skin, joints, kidney and serosal membranes.



PLAY PICMONIC

#### **Mechanism and Characteristics**

# Systemic Autoimmune Disease

#### Systemic Auto-in-moon

The etiology is not completely understood. The presence of many different autoantibodies demonstrates a lack of self-tolerance. This combined with external triggers such as UV radiation may play a part in the pathophysiology.

# 9:1 female to male ratio

# 9 to 1 Female-butterfly

As with other autoimmune diseases females are affected to a higher degree than males. It is more common in African-American patients than Caucasians.

# Treatment

#### Glucocorticoids

#### Glue-quarter-on-steroids

Local or systemic glucocorticoids are used for acute exacerbations and systemic glucocorticoids are used for severe manifestations.

# NSAIDS

N-sad

Used for symptoms of minimal severity.

# Hydroxychloroquine

#### Hydra-color-queen This is the best longterm therapy for constitutional, cutaneous and articular manifestations.

# Cyclophosphamide

Cyclops-phosphate-P Used for patients with active glomerulonephritis.

#### Complications

#### Lupus nephritis

# Loopy-butterfly with Kidney-in-flames

Occurs in up to 50% of SLE patients and is due to immune complex deposition in the glomeruli, tubular or peritubular capillary basement membranes or larger blood vessels. The most common type is diffuse proliferative glomerulonephritis.

# picmonic

# Libman-Sacks Endocarditis

### Lip-man-Sack on In-donut-heart-card

These noninfectious vegetations are smaller, 1-3 mm, than vegetations in infective endocarditis and rheumatic heart disease. They are also present on both sides of the heart valve unlike infective endocarditis and rheumatic heart disease.

### Secondary Antiphospholipid Antibody Syndrome

#### Secondary Anti-phospholipid-bilayer Ant-tie-body

This is no longer known as lupus anticoagulant syndrome because it is in fact a procoagulant state. Antiphospholipid antibodies cause a hypercoagulable state due to endothelial injury. It is characterized by elevated antiphospholipid antibodies in conjunction with 1 or more of the following: 1) venous thromboembolism, 2) arterial thrombosis, 3) fetal loss.

### Other

# **Drug-induced lupus**

#### Loopy-pill-butterfly

This disease is similar to SLE; however, it is due to certain drugs such as sulfonamides, hydralazine, INH, procainamide and phenytoin (SHIPP) among others. Anti-dsDNA and anti-Smith antibodies are typically absent while anti-histone antibodies are classically present. Treatment involves discontinuing the offending drug and starting the patient on prednisone if needed.