

Systemic Lupus Erythematosus
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 Multiple Skin disease Reddening of the
 Organs like a skin.
 Wolf Bite?

- It is autoimmune disease affecting multiple systems.
- Women in reproductive age 10 fold increase than men.

Risk Factors

- 1) Genetic Predisposition.
- 2) Environmental → UV radiation (Sunlight), Sex hormones (Oestrogen), Medications.

Pathophysiology

Genetic + Environmental triggers
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 Destruction of cell nucleus in skin
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 Antigens (DNA, Histones)
 ↓
 Antibody against Nucleus by B cells
 ↓
 Antigen Antibody Complex
 ↓
 Transmitted to blood, other systems.
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 Activation of the Complementary System.

Clinical Features → Females of child bearing age
 1) General - Fever, weight loss, lymphadenopathy.
 2) Specific → Depends upon organ/tissue.

Organs

1) Skin:

1) Malar Rash $\Rightarrow$ Butterfly rash. 20%.

- Erythematous, itchy, painful, sparing the nasolabial fold. Mimics like Rosacea.

2) Discoid Rash

- Hyperkeratosis, plugging, and scarring.

3) Diffuse Non Scarring Alopecia.

4) Livedo reticularis (Antiphospholipid syndrome).

2) Serosa $\Rightarrow$ ^{3) Photoreactivity} Outer membranes

- Pleuritis. Peritonitis.

- Pericarditis, Endocarditis (Libman-Sacks Endocarditis), Myocarditis.

- $\uparrow$ Risk of atherosclerosis.

3) Mucosa

- Mouth ulcers, Bowel infarction & Perforation.

4) Arthritis

- In 90% of patients, with multiple joints and early morning stiffness.

- Taccoud's Arthropathy.

5) Raynaud's Phenomenon - with digital ulceration.

- ⑥ Kidney - Determinants of Prognosis.
 - Diffuse Proliferative Glomerulonephritis.
- ⑦ Neurology - Fatigue, Headache, Psychosis.
 chorea, Hallucination, Meningitis.
- ⑧ Hematological - $\downarrow$ RBC, $\downarrow$ WBC, $\downarrow$ Platelets

Diagnosis:

- Presence of 4 or more criteria of 11 criteria.

Antibodies

- ① Antinuclear antibodies $\rightarrow$ large proportion.
 $\rightarrow$ Very sensitive, Not specific
- ② Anti-Smith (targets ribonucleoproteins) } $\rightarrow$ Specific
- ③ Anti-dsDNA (targets double stranded DNA) } $\rightarrow$ Specific
 In active disease
- ④ Anti-phospholipid antibody (less specific),
 $\rightarrow$ $\uparrow$ ESR, $\uparrow$ CRP, chest x-ray, $\uparrow$ Complement.

Management

- Avoid sunlight, alcohol,