



Cosmopolitan
Dermatology

MEDICAL | SURGICAL | COSMETIC

Lupus and Scarring Alopecia

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Cosmopolitan Dermatology

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Introduction

- Autoimmune disorder
- Affects skin, kidney, joints, heart, lungs
- Signs and symptoms
 - Butterfly rash
 - Joint pain, stiffness, swelling
 - Fatigue, shortness of breath, chest pain
 - Raynauds, photosensitivity



Epidemiology

- 6:1 Ratio Women to men
- 4x higher in African American women than in caucacian women
- African americans higher incidence
 - Nephritis, pneumonitis, discoid lesions
 - Develop disease at an earlier age
 - Higher mortality rate



Pathogenesis

- Cause is not known
- Some agent (?infection) triggers the immune system to react by attacking “self.”
- Genetics play a role
- Environment may also play a role



Classification of Skin Lesions

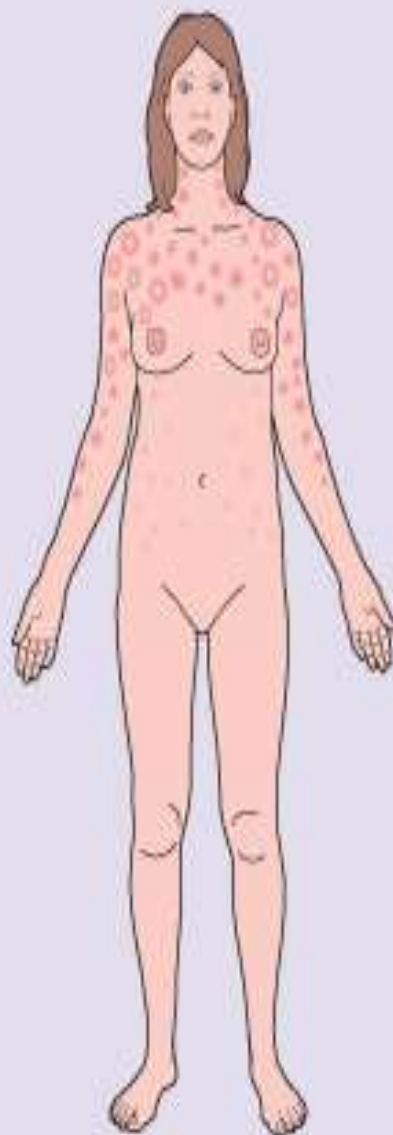
- Acute
- Subacute
- Chronic

CHARACTERISTIC SITES OF INVOLVEMENT FOR THE THREE MAJOR SUBTYPES OF CUTANEOUS LUPUS ERYTHEMATOSUS

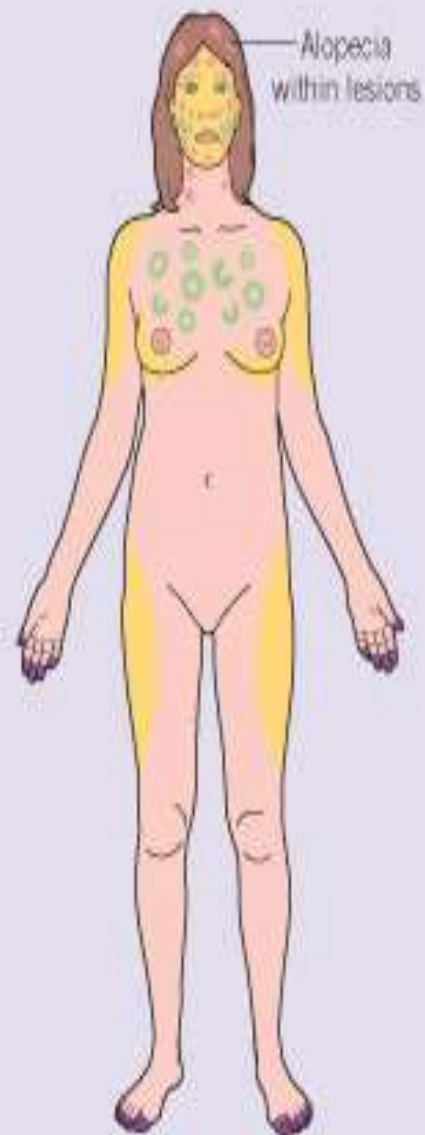
Acute cutaneous LE



Subacute cutaneous LE



Chronic cutaneous LE



LE tumidus

Lupus panniculitis

Discoid LE

Chilblain lupus



Classification of Skin Lesions

- **Acute Cutaneous Lupus**
 - Butterfly malar rash
 - Follows sun-exposure
 - Associated with systemic lupus



Acute Cutaneous LE





Acute Cutaneous LE

- Associated with systemic LE
- Malar 'butterfly' rash
 - Erythema
 - Scale
 - Edema
 - Papules
 - Follows sun exposure
- Other areas can also be involved





Systemic LE

- Women of childbearing age
- Skin involvement in ~80%
 - 4 of ACR's criteria for SLE are mucocutaneous
- Prevalence 4x greater in AA
 - ↑ nephritis, pneumonitis, discoid lesions
 - ↓ photosensitivity
 - earlier age of onset
 - higher mortality



ACR's Criteria for SLE

- Malar rash
- Discoid rash
- Photosensitivity
- Oral ulcers
- Positive ANA
- Arthritis
- Proteinuria
 - >0.5 g/day or casts
- Neurologic disorder
 - seizures, psychosis
- Pleuritis/pericarditis
- Blood abnormalities
 - hemolytic anemia, leukopenia, thrombocytopenia
- Immunologic disorder
 - anti-dsDNA, anti-Sm, anticardiolipin antibodies



Cutaneous findings in SLE

- Vascular lesions
 - Erythema, edema of fingers, toes
 - Periungual tlg's
 - Red or spotted lunulae
 - EM like lesions (Rowell syndrome)
 - Livedo pattern (r/o Sneddon syn)
- **Diffuse, nonscarring alopecia**
 - **Lupus hairs**
- Mucous membrane ulcerations
- Multiple, eruptive **dematofibromas**
- Leg ulcers
- Calcinosis cutis



Classification of Skin Lesions

- **Subacute**

- Confined to sun-exposed areas
- Photosensitive
- Lesions DO NOT SCAR
- Can be caused by medications (HCTZ, diltiazem, terbinafine)
- Anti-Ro Antibodies





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Classification of Skin Lupus

- Chronic Cutaneous Lupus
 - **Discoid Lupus**
 - Discoid lesions on face, scalp & ears
 - Can occur on mouth and lips
 - Disfiguring scarring & hair loss
 - Goes deep into skin to affect hair follicles
 - Discoloration-white centers and dark edges
 - Can develop **skin cancer** within lesions
 - 5-10% can develop systemic lupus





Discoid LE

- Young adults, women:men = 2:1
- Indurated scaly plaques
 - Above neck: face, scalp, ears
- Atrophy, scarring, pigment changes
- 95% only skin involvement





Generalized DLE

- Generalized variant
 - Less common
 - Head, Neck, Thorax, Extremities
 - ANA, ESR, ssDNA
 - Leukopenia
- Adnexal involvement
 - Follicular plugging
 - Scarring alopecia
- Mucosal involvement





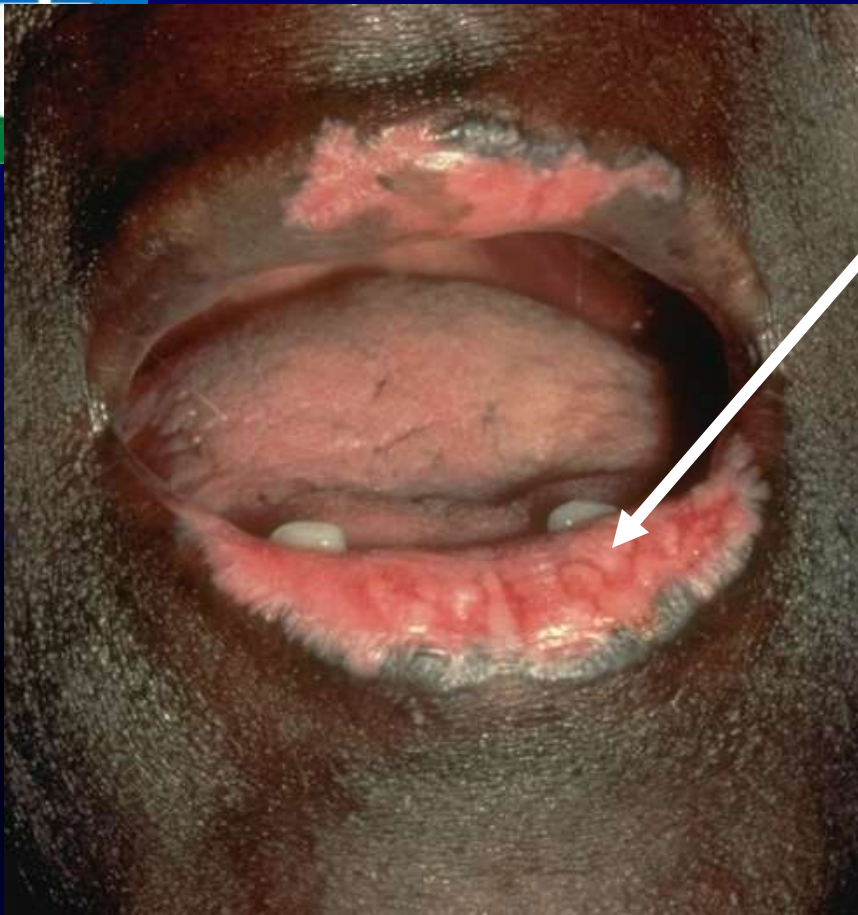


- Early perifollicular erythema
- Easily extracted anagen hairs



- Smooth, shiny scarring
- Loss of follicles

Mucosal erosions with rim of erythema



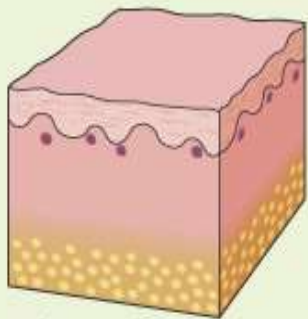


- Progression to SLE uncommon
 - ~ 5-10%
 - Higher risk with extensive disease
 - 1/11 criteria for SLE
- Pts with SLE freq have DLE
 - Fever, arthralgias
 - ANA, dsDNA
- Development of **SCC** in chronic lesions

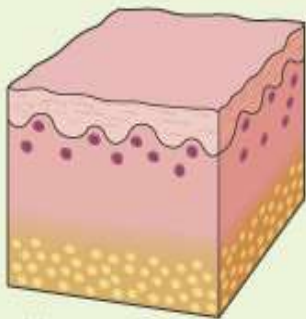




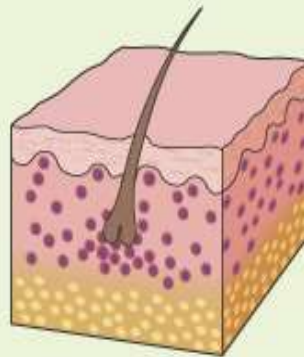
PREDOMINANT LOCATIONS OF INFLAMMATORY INFILTRATES IN SUBSETS OF CUTANEOUS LUPUS



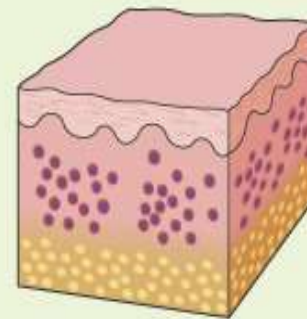
ACLE



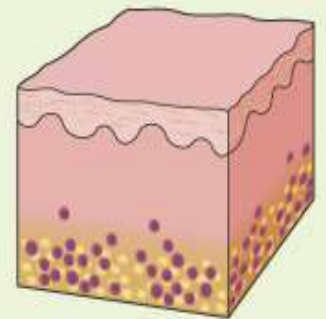
SCLE



DLE



TLE



LEP



Chronic Cutaneous Lupus

- **Lupus Panniculitis**
 - Affects fat within the skin
 - Leads to depressed areas
 - Occurs on face, upper arms, **scalp**, buttocks, thighs, breast, trunk



Lupus panniculitis



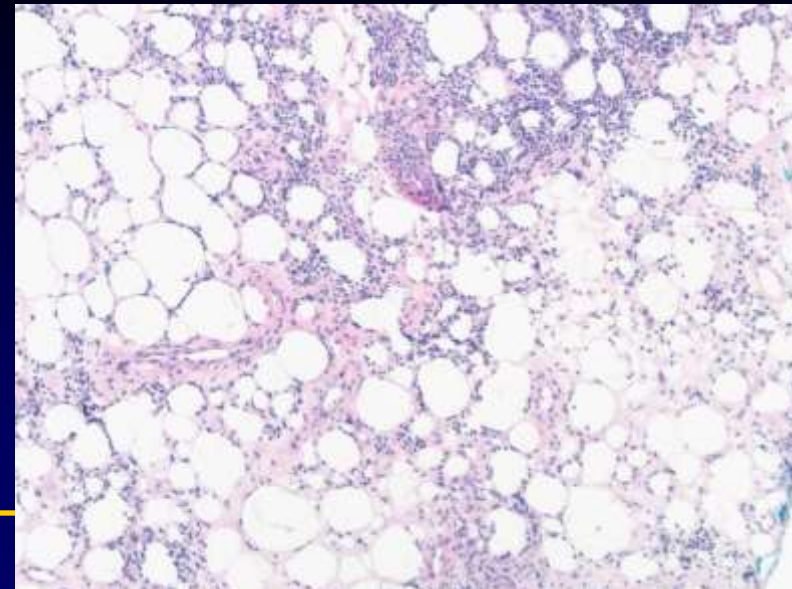


DermNetNZ.org



Lupus panniculitis/profundus

- Women 20-45
- Firm, nontender SQ nodules
- Proximal extremities
- Overlying skin normal, +/- DLE
- Heal with depressions
- Path: Lymphoid follicles in septae, fat necrosis, “Frost on a window pane” – MC in lipodermatoscl but may be present

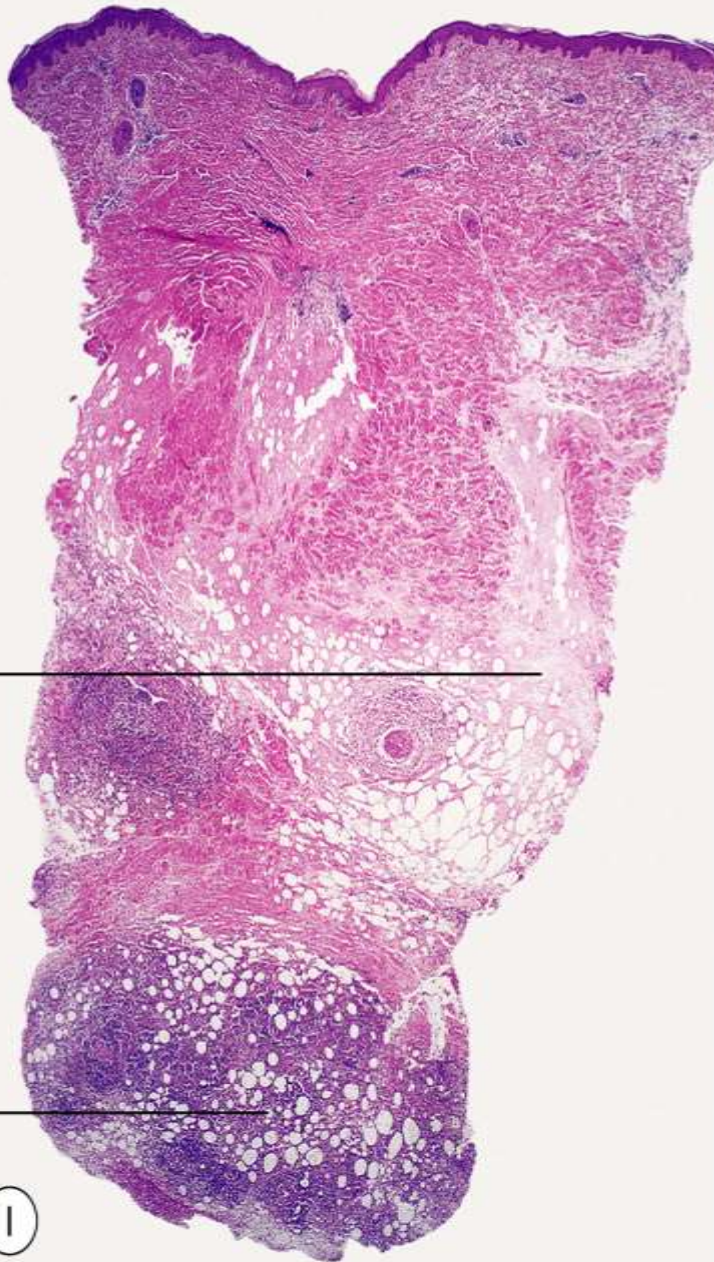




Fat necrosis

Lobular panniculitis

①





Work-up for Lupus



Labs

- Biopsy the affected areas
- CBC: Hemolytic anemia, thrombocytopenia
- Lymphopenia
- ESR → correlates with activity
- IgG elevated, serum globulin increased (γ)
- Urine → albumin, RBCs, casts



Immunologic findings in SLE

- ANA very sensitive (95%)
- Anti-dsDNA, most specific (~60%)
 - Correlates with disease activity
 - Renal disease
- Anti-Smith
 - Low sensitivity, very specific
- Anti-rRNP (~7%)
 - MCTD, neuropsychiatric manifestations
- Lupus band (DIF)
 - Continuous granular deposits of Ig and complement along DEJ ('full house')



Immunologic findings in SLE

- Anti-La → SCLE, Sjogren syndrome
- Anti-Ro → 25% SLE, 40% Sjogrens, SCLE (70%), neonatal LE (95%), C2-C4 deficient LE (50-75%), late onset LE (75%)



Treatment of Cutaneous LE

- Sun avoidance and sunscreen
- Topical steroids
- ILK
- Antimalarials – first line therapy
 - Plaquenil. Dose?
 - 6.5 mg/kg/day IBW
- Corticosteroids
 - Calcium + Vit D, bisphosphonates



Other Treatment Options

- Azathioprine
 - 1.5-2.5 mg/kg/day
- Mycophenolate mofetil
 - 2.5-3.5 g/day
- Methotrexate
 - 7.5-25 mg po or SQ/week



Lupus and Hair Loss



Hair Loss

- Caused primarily by Discoid lupus
- Also seen in Lupus profundus
- Affects deeper layers of skin where hair follicles and fat are located





Discoid Lupus





Lupus Panniculitis











Treatment

- Topical steroids
- Intralesional steroids
- Antimalarials (hydroxychloroquine)
- Systemic steroids
- Steroid sparing agents: azathioprine, mycophenolate mofetil











Treatment

- Minoxidil 5% solution or foam
- Biotin forte 3mg with zinc
- Camouflage





New!
Easy to Use
Applicator



Women's Rogaine®

**2% Minoxidil Topical Solution
Hair Regrowth
Treatment**

*Clinically Proven to
Help Regrow Hair*

*Revitalizes Hair
Follicles*

**Three Month Supply
3-60mL (2 fl oz) Bottles**



Women's Rogaine® is for women who have a general thinning of hair on the top of the scalp as shown. Women's Rogaine® has been shown to regrow hair in women with the following degrees of thinning hair as shown.



If women have seen hair loss like shown above, Women's Rogaine® may not work.

Do not use if you have patchy hair loss as shown below.



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Thank You
Questions

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