













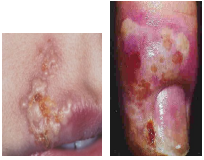

# Derma Summary





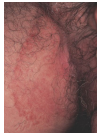


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*Good luck..*

## Skin Infections






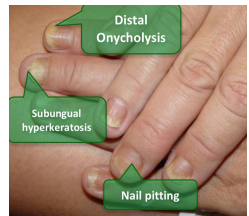
Disease		Description	Organism	+ info	Management	Picture
<b>Bacterial</b>						
<b>Impetigo</b>	<b>Non-bullous</b>	<ul style="list-style-type: none"> <li>- Most common.</li> <li>- Clusters of vesicles or pustules with rim of erythema that rupture and develop <b>golden-yellow (Honey) crust</b></li> </ul>	<ul style="list-style-type: none"> <li>- S. Aureus</li> <li>- Group A beta-hemolytic streptococcus</li> </ul>	<ul style="list-style-type: none"> <li>- Warm humid climate</li> <li>- Very contagious</li> </ul> <p><u>Complications:</u></p> <ul style="list-style-type: none"> <li>- Guttate psoriasis</li> <li>- <b>post-streptococcal glomerulonephritis.</b></li> </ul>	<ul style="list-style-type: none"> <li>- Swab</li> <li>- Remove crust</li> <li>- Localised topical abx (bactroban, bacitracin)</li> <li>- recurrent → Mupirocin</li> <li>- Severe → systemic Abx (cephalosporins)</li> </ul>	
	<b>bullous</b>	<ul style="list-style-type: none"> <li>- Affect newborn and older children.</li> <li>- Flaccid bullae on grossly normal skin</li> <li>- Face, hands, diaper area</li> </ul>	<ul style="list-style-type: none"> <li>- S. Aureus</li> </ul>			
<b>Erysipelas</b>		<ul style="list-style-type: none"> <li>- Superficial infection with <b>lymphatics involvement.</b></li> <li>- <b>Well-defined</b>, unilateral, red edematous. (face &amp; leg)</li> </ul>	<ul style="list-style-type: none"> <li>- Group A beta-hemolytic streptococcus.</li> </ul>	<ul style="list-style-type: none"> <li>- Leukocytosis</li> <li>- Fever</li> <li>- Chills</li> <li>- Bacteremia</li> </ul>	<ul style="list-style-type: none"> <li>- Smear + culture</li> <li>- Cold compressor.</li> <li>- Oral Abx (penicillin) or I.V. for severe infection</li> </ul>	
<b>Cellulitis</b>		<ul style="list-style-type: none"> <li>- Deeper involvement of the dermis and <b>subcutaneous tissue.</b></li> <li>- Acute, <b>ill-defined</b>, raised, hot, tender, erythematous (leg).</li> </ul>	<ul style="list-style-type: none"> <li>- Strep. Pyogenes,</li> <li>- S. Aureus.</li> </ul>	<ul style="list-style-type: none"> <li>- Palpable tender LN</li> <li>- Leukocytosis</li> <li>- Fever</li> </ul> <p>RF: DM, HTN, obesity Complication → lymphedema</p>	<ul style="list-style-type: none"> <li>- Swab + blood culture</li> <li>- Acetaminophen</li> <li>- IV penicillinase-resistant penicillin or Erythromycin if allergic.</li> </ul>	
<b>Folliculitis</b>		<ul style="list-style-type: none"> <li>- <b>Superficial</b> hair follicle infection</li> <li>- Multiple small papules / pustule on an erythematous base.</li> <li>- Heals without scarring</li> </ul>		<ul style="list-style-type: none"> <li>- <u>Complications:</u> abscess formation and cavernous sinus thrombosis.</li> </ul>	<ul style="list-style-type: none"> <li>- Topical and systemic Abx</li> </ul>	
<b>Furuncle (boil)</b>		<ul style="list-style-type: none"> <li>- Inflammation of <b>deep</b> portions of hair follicle</li> </ul>	<ul style="list-style-type: none"> <li>- S. Aureus</li> </ul>	-	<ul style="list-style-type: none"> <li>- Swab: Culture and GS</li> <li>- Antibacterial soap</li> <li>- Antibiotics.</li> </ul>	
<b>Carbuncle</b>		<ul style="list-style-type: none"> <li>- Infection of <b>multiple</b> hair follicles</li> <li>- Larger <b>more deep</b> seated</li> <li>- Drainage through multiple points in the skin.</li> </ul>		-	<ul style="list-style-type: none"> <li>- Swab : Culture and GS</li> <li>- Screen for carrier state</li> <li>- Antibiotics (IV)</li> </ul>	

Disease	Description	Organism	+ info	Management	Picture	
Viral						
<b>Warts</b>	<b>Plane</b> (Verruca plana)	- Affects Face, back of hands . - Flat skin colored papules, no hyperkeratosis. Not painful.	- HPV type 3,10	-	- Topical retinoids. - Cryotherapy - Laser	
	<b>Common</b> (verruca vulgaris)	- Affects the hands. - Common in Children - Skin color <b>hyperkeratotic</b> papules. - Koebner phenomenon.	- HPV type 1,2,4	-	- Topical keratolytics	
	<b>Plantar</b> (verruca plantares)	- Affects the soles. - Often painful. - Black dots, thrombosed BV.	- HPV type 1,2,4	-	- Topical retinoids. - Cryotherapy - Laser	
	<b>Genital</b> wart	- Most common STD - Condylomata accuminata - Penile, vulvar skin, perianal area - Cauliflower like	- HPV <b>6, 11</b> - Oncogenic: HPV <b>16, 18</b>	- Treat the partner	- <b>Podophyllotoxin</b> : cytotoxic - <b>Imiquimod</b> : immunomod. - Physical: cryotherapy, laser	
<b>Molluscum contagiosum</b> المليساء المعدي	- Affects the face, neck - Skin colored papules with <b>central punctum</b> (umbilication) - Koebner phenomenon.	- Pox-virus	- <b>Hunderson-patterson bodies</b> . - In children by contact. - Adults: STD, immunosuppression.	- Involute spontaneously. - Curettage, cryotherapy.		
<b>Herpes simplex</b>	- Group of small blister. - Mucocutaneous - Painful - Recurrent	- HSV-1(H. labialis) - HSV-2 (genital herpes)	- Herpetic whitlow (fingertips) - Eczema herpeticum.	- Tzanck Smear. - Serology (IgG, IgM). - Direct fluorescent ab. - <b>Viral culture</b> . - Acyclovir.		
<b>Herpes zoster</b>	- Grouped blisters and vesicles on background of erythema. - Prodromal pain—dermatomal post-herpetic neuralgia.	- Chickenpox virus.	- Complications: <b>conjunctivitis &amp; keratitis</b> . - Facial nerve affected → <b>Ramsay Hunt Syndrome</b> .	- Tzanck Smear. - Direct fluorescent ab - Analgesia, drying agent - Acyclovir.		

Disease	Description	Organism	+ info	Management	Picture		
Fungal							
<b>Candidiasis</b>	<ul style="list-style-type: none"> <li>- Satellite lesions → Napkin candidosis &amp; Intertrigo (skin folds).</li> <li>- Paronychia, oral thrush</li> <li>- Very bright, ill-defined, oozing.</li> </ul>	- Candida albican.	-	<ul style="list-style-type: none"> <li>- Swab and KOH</li> <li>- Dry.</li> <li>- Nystatin cream.</li> <li>- Imidazole</li> <li>- Antifungal (itraconazole).</li> </ul>			
<b>Dermatophyte Infections</b>	<b>T. pedis</b>	<ul style="list-style-type: none"> <li>- Sole of foot (athlete's), webs.</li> <li>- Erosive interdigitalis.</li> <li>- Well defined scaly erythematous plaque, Itchy.</li> </ul>	<ul style="list-style-type: none"> <li>- Hyperkeratotic → <b>T. rubrum</b></li> <li>- Inflammatory → <b>T. mentagrophyte</b></li> </ul>	- Itchy, chronic.	-		
	<b>T. Ungum</b>	<ul style="list-style-type: none"> <li>- Affects the nails</li> <li>- Onycholysis.</li> <li>- Subungual hyperkeratosis.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>T. rubrum</b></li> <li>- <b>T. mentagrophyte</b></li> </ul>	-	- KOH and culture.		
	<b>T. manun</b>	<ul style="list-style-type: none"> <li>- Diffuse dry scaling over the palm.</li> <li>- Hyperkeratosis with vesicle and pustules.</li> </ul>	-	-	-	-	
	<b>T. Cruris</b>	<ul style="list-style-type: none"> <li>- Infection of genital skin</li> <li>- Active border.</li> </ul>	-	-	-	-	
	<b>T. capitis</b>	<ul style="list-style-type: none"> <li>- Well circumscribed pruritic scaling area of <u>hair loss</u> (grey patch)</li> </ul>	<ul style="list-style-type: none"> <li>- Black dot → <b>T. tonsurans</b></li> <li>- Ectothrix → <b>M. canis, M. Audouinii</b></li> </ul>	- Itchy, chronic.	<ul style="list-style-type: none"> <li>- KOH and culture</li> <li>- Wood's light greenish-yellowish.</li> <li>- Topical (terbinafine, daktarin)</li> </ul>		
	<b>Tinea corporis</b>	<ul style="list-style-type: none"> <li>- Well-demarcated annular red hyperkeratotic plaque with central clearing (Ring worm)</li> </ul>	<ul style="list-style-type: none"> <li>- Hyperkeratotic → <b>T. rubrum</b></li> <li>- Inflammatory → <b>T. mentagrophyte</b></li> </ul>	-	-	-	

Disease	Description	Organism	+ info	Management	Picture
<b>Pityriasis versicolor</b> النخالة المبرقشة	<ul style="list-style-type: none"> <li>- Yellowish brown → (in white skin)</li> <li>- Hypopigmented → (in dark skin)</li> <li>- Trunk</li> <li>- Asymptomatic.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Malassezia furfur</b> (hyphae).</li> <li>- Pityrosporum orbiculare (yeast).</li> </ul>	-	<ul style="list-style-type: none"> <li>- Wood's lamp → <b>coppery-orange</b> fluorescence.</li> <li>- Topical <b>imidazole</b> (nizoral).</li> </ul>	
<b>Protozoal</b>					
<b>Leishmaniasis</b>	<ul style="list-style-type: none"> <li>- Slowly growing painful papule into ulcerated nodule or plaque</li> <li>- Exposed sites.</li> <li>- Transmitted with sandfly.</li> </ul>	<ul style="list-style-type: none"> <li>- Sand fly <i>L.tropica</i> , <i>L. major</i></li> <li>- Sand fly (promastigote).</li> </ul>	Clinical patterns: <ul style="list-style-type: none"> <li>- Cutaneous: (localised or diffuse).</li> <li>- Mucocutaneous.</li> <li>- Visceral (<b>post kala-azar</b>): liver &amp; spleen</li> </ul>	<ul style="list-style-type: none"> <li>- Skin biopsy (amastigotes)</li> <li>- Tissue impression smears (touch preparations)</li> <li>- smears of dermal scrapings (edge of ulcer)</li> <li>- Giemsa stain.</li> <li>- <b>PCR-based method.</b></li> <li>- Rx: Parenteral pentavalent antimonials (<b>Sodium stibogluconate</b>)</li> </ul>	
<b>Infestation</b>					
<b>Scabies</b> الجرب	<ul style="list-style-type: none"> <li>- Severe itching <b>worse after bathing</b> and at night.</li> <li>- <b>Sites</b> → finger webs, flexor of the wrist, axillae, areolae, umbilicus, lower abdomen and scrotum.</li> <li>- <b>Linear burrows</b> (tunnel of mite)</li> <li>- Small erythematous papules+ variable degree of excoriation vesicles, indurated nodules or crustacean.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Sarcoptes scabiei var. Hominis</b></li> <li>- 60-90 eggs in her 30-day lifespan.</li> </ul>	<ul style="list-style-type: none"> <li>- Might be complicated by secondary bacterial infection.</li> <li>- Other member of the family also having severe pruritus.</li> </ul>	<ul style="list-style-type: none"> <li>- India ink or gentian violet.</li> <li>- Tx of family members.</li> <li>- Washing clothing &amp; linen</li> <li>- <b>Permethrin</b> cream</li> <li>- Lindane lotion or cream (not safe in children d.t neurotoxicity or pregnancy).</li> <li>- Crotamiton cream.</li> </ul>	
<b>Pediculosis capitis</b> القمل	<ul style="list-style-type: none"> <li>- Common in school children.</li> <li>- Severe itching of the scalp (occipital)</li> <li>- Posterior cervical LN.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>pediculus humanus var capitis</b> → 3-6 eggs (nits) per day</li> </ul>	<ul style="list-style-type: none"> <li>- Secondary bacterial impetigo.</li> </ul>	<ul style="list-style-type: none"> <li>- Identification of nit/adult</li> <li>- Examination of other family members</li> <li>- Wash all fomites</li> <li>- Combing: metal nit comb</li> <li>- Pyrethrin.</li> <li>- <b>Permethrin</b> lotion</li> </ul>	

## Papulosquamous

Disease	Types	Pic	Features	Notes
<p><b>Psoriasis</b></p> <p>Inflammatory skin condition with reactive abnormal epidermal differentiation &amp; hyper proliferation (within 10 days).</p>	<p><b>Plaque psoriasis</b> (Psoriasis Vulgaris)</p>		<ul style="list-style-type: none"> <li>- Most common</li> <li>- Silvery scaly round-to-oval red <b>plaques</b> distributed over extensor body surfaces and the scalp</li> </ul>	<p><b>Risk factors:</b></p> <ul style="list-style-type: none"> <li>- Drugs (lithium, anti-malarial drugs, NSAIDs and beta-blockers)</li> <li>- Koebner phenomenon</li> </ul> <p><b>Histology:</b></p> <ul style="list-style-type: none"> <li>- Parakeratosis</li> <li>- Auspits sign: due to thick dermis &amp; thin epidermis</li> <li>- Epidermal polymorphonuclear leucocyte infiltrates (<b>Epidermo-Tropism</b>) = (<b>Munro abscesses</b>)</li> </ul> <p><b>Causes of Pustular Psoriasis:</b></p> <ul style="list-style-type: none"> <li>- Idiopathic</li> <li>- Withdrawal of systemic steroids</li> <li>- Drugs; including: Salicylates, Lithium, Phenylbutazone, Hydroxychloroquine, Interferon</li> <li>- Strong, irritating topicals: Tar, Anthralin, Steroids under Occlusion, and Zinc Pyrithione in shampoo</li> <li>- Infections</li> <li>- Sunlight (or Phototherapy)</li> <li>- <b>Cholestatic Jaundice</b></li> <li>- Hypocalcemia.</li> </ul>
	<p><b>Guttate</b></p>		<ul style="list-style-type: none"> <li>- Small, droplike, 1-10 mm in diameter, salmon-pink papules, usually with a fine scale</li> <li>- Younger than 30 years</li> <li>- Trigger: <b>streptococcal infection</b></li> </ul>	
	<p><b>Erythro-dermic</b></p>		<ul style="list-style-type: none"> <li>- Scaly erythematous lesions over large areas with few typical psoriatic plaques</li> <li>- Hair shed; nails become ridged &amp; thickened</li> <li>- Unwell, fever, leukocytosis</li> <li>- Increase cutaneous blood flow &gt; Excessive body heat and hypothermia &gt; Increase percutaneous permeability &gt; Increase percutaneous loss of water, protein &amp; iron</li> </ul>	
	<p><b>Pustular</b></p>		<ul style="list-style-type: none"> <li>- Sterile small pustules on erythematous background</li> <li><b>1- Generalized type (von Zumbusch variant):</b></li> <li>- Generalized erythema studded with interfollicular pustules.</li> <li>- <u>Fever, tachypnea and tachycardia.</u></li> <li>- Absolute lymphopenia with <u>polymorphnuclear leukocytosis</u> up to 40,000/<math>\mu</math>L.</li> <li><b>2- Localized form (in palms and soles)</b></li> </ul>	
	<p><b>Psoriasis inversus</b> (Sebopsoriasis)</p>		<ul style="list-style-type: none"> <li>- Occurs in armpits, groin and skin folds</li> <li>- The erythema and scales are very similar to that seen in Seborrheic dermatitis (it has no or very thin scales)</li> </ul>	
	<p><b>Psoriatic Arthritis</b></p>		<ul style="list-style-type: none"> <li>- Most commonly a <b>seronegative oligoarthritis</b>.</li> <li>- Asymmetric oligoarthritis occurs in as many as 70% of patients with psoriatic arthritis</li> <li>- DIP joint involvement occurs in approximately 5-10</li> <li>- Arthritis mutilans: 5% of patients</li> </ul>	






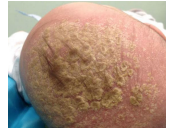
Disease	Types	Pic	Features	Notes
<b>Lichen Planus</b>	Hypertrophic		These extremely <b>pruritic</b> lesions are most often found on the extensor surfaces of the lower extremities, especially around the ankles.	<ul style="list-style-type: none"> <li>- Associated with: Ulcerative colitis, alopecia areata, vitiligo, dermatomyositis, <b>HCV</b> infection, chronic active hepatitis, and primary biliary cirrhosis</li> <li>- Drug induced: Thiazide, Antimalarials, Propranolol.</li> </ul> <p><b>Clinical features:</b></p> <ul style="list-style-type: none"> <li>- Initial lesion on the flexors &gt; generalized eruption develops with within 2-16 weeks</li> <li>- Papules are violaceous, shiny, &amp; polygonal; varying in size from 1mm to greater than 1 cm in diameter</li> <li>- Fine, white lines, called <b>Wickham Stria</b>, are often found on the papules</li> <li>- Nail plate thinning causes longitudinal grooving and ridging</li> <li>- Subungual hyperkeratosis and Onycholysis.</li> <li>- <b>Pterygium unguis (Dorsal pterygium)</b> forms as a result of scarring between the proximal nailfold and matrix.</li> </ul>
	Atrophic		- Characterized by a few lesions, which are often the resolution of annular or hypertrophic lesions	
	Erosive		- Risk of <b>squamous cell carcinoma</b>	
	Follicular		- Keratotic papules that may coalesce into plaques - A <b>scarring alopecia</b> may result	
	Annular		- Annular lesions with an atrophic center can be found on the <b>buccal mucosa</b> and the male genitalia	
	Vesicular and bullous		- Develop on the lower limbs or in the mouth from preexisting LP lesions	
	Actinic		- Mildly pruritic eruption - Nummular patches with a <b>hypo-pigmented zone surrounding a hyperpigmented center</b>	
	Pigmentosus		- Common in persons with <b>darker-pigmented skin</b> - Usually appears on face and neck.	
	Plano-pillaris	-	- Patchy progressive permanent hair loss mainly on the scalp	-
<b>Pityriasis Rosea</b> نخالة وردية	-		<ul style="list-style-type: none"> <li>- Increased incidence in Spring and Autumn</li> <li>- Begins with <b>herald spot/patch</b></li> <li>- Salmon-colored macule over trunk and proximal limbs, looks like secondary syphilis but it spares hands &amp; soles</li> <li>- Pruritus is common, usually of mild-to-moderate severity</li> </ul>	<ul style="list-style-type: none"> <li>- Human herpesvirus (<b>HHV</b>)-7 &amp; <b>HHV-6</b></li> <li>- Drug induced:</li> <li>- Captopril, metronidazole, isotretinoin, penicillamine, bismuth, gold, barbiturates, &amp; omeprazole</li> </ul>



## Papulosquamous diseases management

Psoriasis	Lichen Planus	Pityriasis Rosea
<p><b>1st line</b> Topical agent for mild to moderate psoriasis:</p> <ul style="list-style-type: none"> <li>- Emollients</li> <li>- Keratolytics (salicylic acid) &gt; for scales</li> <li>- <b>Coal tar &amp; Anthralin</b> &gt; for increased mitosis</li> <li>- Vitamin D</li> <li>- Corticosteroids</li> <li>- Retinoids</li> </ul> <p><b>2nd line</b> If no response to topical therapy or &gt;20% BDA involved:</p> <ul style="list-style-type: none"> <li>- Phototherapy                             <ul style="list-style-type: none"> <li>- Natural sunlight</li> <li>- UVB</li> <li>- UVA &amp; <b>Psoralen</b></li> </ul> </li> </ul> <p><b>3rd line</b> If no response or + <u>psoriatic arthritis</u></p> <ul style="list-style-type: none"> <li>- Methotrexate &gt; check for LFT</li> </ul> <p><b>Others:</b></p> <ul style="list-style-type: none"> <li>- Acitretin (oral retinoid)</li> <li>- <b>Cyclosporine</b></li> <li>- Biological therapy (Infliximab) &gt; check for TB</li> </ul>	<ul style="list-style-type: none"> <li>- Self-limited disease that usually resolves within 8-12 months.</li> <li>- Treat to prevent hyperpigmentation.</li> <li>- <b>Antihistamine</b> (for pruritus).</li> <li>- Topical steroids, particularly class I or II ointments</li> <li>- Systemic steroids for symptom control and possibly more rapid resolution</li> <li>- Oral Acitretin (Retinoid).</li> <li>- Photo-therapy</li> </ul>	<ul style="list-style-type: none"> <li>- Tends to resolve over the next 6 weeks without scarring</li> <li>- Reassurance that the rash will resolve</li> <li>- Relief of pruritus</li> <li>- Topical menthol-phenol lotion</li> <li>- Oral antihistamines</li> <li>- Topical steroids</li> <li>- Systemic steroids</li> <li>- Ultraviolet B (UVB) light therapy</li> <li>- <b>Antiviral</b></li> </ul>








## General principles of eczema /dermatitis


Disease	Description	Clinical features	Management	notes	Picture
<b>Eczema (Dermatitis)</b>	<ul style="list-style-type: none"> <li>- Skin inflammation characterized by → itchy, scaly, patches of erythema.</li> </ul>	<ul style="list-style-type: none"> <li>- <u>Subacute Dermatitis</u>: misdiagnosed as tinea</li> <li>- <u>Chronic Dermatitis</u>: misdiagnosed as psoriasis</li> </ul>	-	<p><b>Eczema classified:</b></p> <ul style="list-style-type: none"> <li>- <u>Acute</u>: erosion, oozing and vesicles</li> <li>- <u>Subacute</u>: Redness + swelling, crust ± scale + infection</li> <li>- <u>Chronic</u>: lichenification, dark pigmentation and thick papules and plaques.</li> </ul>	
<b>Atopic Dermatitis</b>	<ul style="list-style-type: none"> <li>- Chronic <u>relapsing</u> itchy skin disease in genetically predisposed patients</li> <li>- Defective epidermal differentiation (<b>filaggrin mutations</b>) → impaired barrier function of the skin</li> </ul>	<ul style="list-style-type: none"> <li>- Colonized by S aureus.</li> <li>- <b>Infantile</b> → acute itchy vesicular eczema on extensor/facial involvement (Diaper area is spared)</li> <li>- <b>Childhood</b> → subacute and chronic at <u>antecubital and popliteal fossae</u>, neck, wrists and ankles, lichenification, post-inflammatory hyperpigmentation.</li> <li>- <b>Adult</b> → chronic inflammation on flexors and hand dermatitis.</li> </ul>	<ul style="list-style-type: none"> <li>- 70% remission before adolescence</li> </ul> <p><b>Diagnostic Features:</b></p> <ul style="list-style-type: none"> <li>- <u>Major</u> → pruritus, chronicity, Personal or family .</li> <li>- <u>Minor</u> → Xerosis (dry), early onset, cheilitis, nipple eczema, <b>Dennie morgan fold</b>, Pityriasis alba ,keratoconus.</li> </ul> <p><b>Treatment:</b></p> <ul style="list-style-type: none"> <li>- Education, Emollient.</li> <li>- Topical steroid</li> <li>- Topical immunomodulators.</li> <li>- Oral antihistamine</li> <li>- Oral Antibiotic.</li> </ul>	<ul style="list-style-type: none"> <li>- Associated with personal or family history of other atopic conditions as <b>asthma, allergic rhinitis, conjunctivitis or atopic eczema</b></li> <li>- 85% begin before 5 yrs</li> <li>- AD associated with local infiltration of Th 2 that secrete IL-4, IL-5, IL-13, IL-31</li> <li>- Complication: Eczema Herpeticum, Impetiginized dermatitis, <b>Mollusca Contagiosa</b>. المليساء المعدية</li> </ul>	  
<b>Seborrheic dermatitis</b>	<ul style="list-style-type: none"> <li>- In regions with high sebum production &amp; the body folds</li> <li>- Erythematous red-yellow patches &amp; thin plaques with bran-like to flaky (greasy) scales.</li> </ul>	<ul style="list-style-type: none"> <li>- Commensal yeast <b>Malassezia furfur (pityrosporum ovale)</b></li> </ul>	<ul style="list-style-type: none"> <li>- Medicated shampoo</li> <li>- Topical antifungal</li> <li>- potency topical steroid.</li> <li>- Topical immunomodulators (tacrolimus &amp; pimecrolimus)</li> <li>- Salicylic acid</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Cradle cap</b>: scaly &amp; crusty mass covering most of the scalp &amp; can be seen in infantile seborrheic dermatitis.</li> </ul>	 



Disease		Description	Clinical features	Management	notes	Picture
<b>Contact Dermatitis</b>	<b>Allergic</b>	- Dermatitis resulting from type 4 reaction.	- Acute form present with crusted erythematous papules, vesicles & bullae that is well demarcated & <i>localized to the site of contact</i> .	<b>Dx:</b> <ul style="list-style-type: none"> <li>- Hx and Examination.</li> <li>- <b>PATCH testing (ACD).</b></li> </ul>	<ul style="list-style-type: none"> <li>- Nickel.</li> <li>- Fragrances.</li> <li>- Preservatives.</li> <li>- Hair dyes.</li> <li>- Rubber latex.</li> </ul>	
	<b>Irritant</b>	- Non immunologically mediated inflammatory reaction → direct cytotoxic effect.	<ul style="list-style-type: none"> <li>- Similar to ACD but ICD <b>never extend beyond the area of contact.</b></li> <li>- Painful rather than pruritic.</li> <li>- Occur from the 1<sup>st</sup> exposure to the irritant unlike ACD which only occur in previously sensitized individual.</li> </ul>	<b>Treatment:</b> <ul style="list-style-type: none"> <li>- Topical steroid.</li> <li>- systemic steroid.</li> <li>- Oral antihistamine.</li> </ul>	<ul style="list-style-type: none"> <li>- Water</li> <li>- Abrasives</li> <li>- Chemicals, e.g.</li> <li>- Solvents and detergents.</li> <li>- Napkin dermatitis</li> <li>- Lip licking</li> </ul>	

## Cutaneous manifestations of SLE and other CTD ( dermatomyositis , scleroderma)

Disease	Description	Diagnosis	Management	Notes	Picture
<b>Acute Cutaneous Lupus Erythematosus</b>	<ul style="list-style-type: none"> <li>- Acute malar “butterfly rash” or more generalized photo-distributed eruption.</li> <li>- Non scarring.</li> </ul>	<ul style="list-style-type: none"> <li>- Hx &amp; examination.</li> <li>- Skin Biopsy.</li> <li>- <b>Lupus Band Test</b> → non-lesional non-exposed skin.</li> <li>- CBC, ESR → high.</li> <li>- Urine analysis.</li> <li>- ↓ C3, C4 → active disease + renal involvement.</li> </ul> <p><b>Serology:</b></p> <ul style="list-style-type: none"> <li>- <b>ANA: +ve in 95%.</b></li> <li>- <b>Anti-dsDNA → Specific. (indicates renal disease).</b></li> <li>- Anti-smith → specific.</li> <li>- Anti-histone Ab → drug induced lupus.</li> <li>- Rheumatoid factor</li> </ul>	<ul style="list-style-type: none"> <li>- Sun protection.</li> <li>- Potent topical steroids</li> <li>- Antimalarial drugs.</li> <li>- Oral steroids.</li> <li>- Methotrexate.</li> </ul>	<ul style="list-style-type: none"> <li>- ALL patients with ACLE will have SLE.</li> <li>- ACLE is transient, improves with improvement of the SLE.</li> <li>- Minocycline can cause all the type SLE symptoms except <b>renal involvement or CNS involvement.</b></li> </ul>	
<b>Subacute Cutaneous Lupus Erythematosus</b>	<ul style="list-style-type: none"> <li>- Scaly, superficial, inflammatory macules, patches, papules and plaques that are <b>photo-distributed,</b></li> </ul> <p><b>Morphologic subtypes:</b></p> <ul style="list-style-type: none"> <li>- Annular/polycyclic lesions.</li> <li>- Papulosquamous lesions. <ul style="list-style-type: none"> <li>- Psoriasiform</li> <li>- Pitryasiform</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Clinical diagnosis</li> <li>- Skin biopsy.</li> <li>- Lupus band test.</li> <li>- <b>Anti-Ro/SS-A.</b></li> <li>- Anti-La/SS-B.</li> </ul>	<ul style="list-style-type: none"> <li>- Sun-protection</li> <li>- Topical steroids</li> <li>- Antimalarial drugs</li> </ul>	<ul style="list-style-type: none"> <li>- About 1/2 patients with have SLE.</li> <li>- Skin disease, <b>photosensitivity,</b> <b>MSK</b> complaints.</li> <li>- SCLE could occur in patients with <b>Sjögren syndrome,</b> deficiency of the C2d, or it may be drug induced (<b>thiazide diuretics</b>).</li> </ul>	

Disease	Description	Diagnosis	Management	Notes	Picture
<b>Chronic Cutaneous Lupus Erythematosus</b>	<ul style="list-style-type: none"> <li>- Localized or generalized.</li> <li>- Chronic, fixed, indurated, erythematous papules and plaques often distributed over the head &amp; neck.</li> <li>- <b>Scarring</b>.</li> <li>- hypo/hyperpigmentation)</li> <li>- Epidermal changes: scales, <b>keratotic plugging of hair</b> follicles, crusting.</li> <li>- External ears.</li> </ul>	<ul style="list-style-type: none"> <li>- Serologic abnormalities are uncommon.</li> </ul>	<ul style="list-style-type: none"> <li>- Sun-protection</li> <li>- Potent topical steroids.</li> <li>- Intralesional steroids on the active borders.</li> <li>- Antimalarial drugs.</li> </ul>	<ul style="list-style-type: none"> <li>- Most common type → <b>Discoid lupus erythematosus</b> “DLE”.</li> <li>- Risk of developing SLE is 5%</li> <li>- <b>Chilblain lupus:</b> Painful bluish-red papular or nodular lesions of the skin in acral locations (including the dorsal aspects of <u>ingers</u> and toes, heels, nose, cheeks, ears)</li> </ul>	
<b>Subacute Neonatal Lupus Erythematosus</b>	<ul style="list-style-type: none"> <li>- The skin lesions occur on the face and head, morphologically resemble SCLE lesions, they are</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Anti-Ro/SS-A.</b></li> <li>- anti-La/SS-B antibodies.</li> </ul>	<ul style="list-style-type: none"> <li>- Transient, resolving within a few months.</li> </ul>	<ul style="list-style-type: none"> <li>- Infants develop skin disease, heart disease.</li> <li>- Disease usually manifests as <b>isolated complete heart block</b> → pacemaker</li> <li>- Thrombocytopenia / liver.</li> </ul>	
<b>Lupus Panniculitis</b>	<ul style="list-style-type: none"> <li>- Inflammation involving the <b>subcutaneous tissue</b>, resulting in inflamed nodules that often resolve with <b>depressed scars</b>.</li> </ul>	<ul style="list-style-type: none"> <li>- Excisional biopsy.</li> </ul>	<ul style="list-style-type: none"> <li>- Antimalarial drugs.</li> </ul>	<ul style="list-style-type: none"> <li>- They could have overlying DLE lesions “<b>Lupus Profundus</b>”</li> <li>- About 1/2 patients with have SLE.</li> </ul>	
<b>Drug-Induced Lupus Erythematosus</b>	<ul style="list-style-type: none"> <li>- <b>Nephritis and central nervous system</b> features are not commonly present.</li> </ul>	<ul style="list-style-type: none"> <li>- No antibodies to native DNA or hypocomplementemia are present.</li> </ul>	<ul style="list-style-type: none"> <li>- Drug discontinuation.</li> </ul>	<p>Drugs induces LE:</p> <ul style="list-style-type: none"> <li>- Chlorpromazine</li> <li>- Hydralazine, Minocycline</li> <li>- Methyldopa, Anti-TNF</li> <li>- Penicillamin, Isonizide</li> <li>- Procainamide - Quinidine.</li> <li>- IFN-alpha, IFN-beta.</li> </ul>	

Disease	Description	Diagnosis	Management	Notes	Picture
<h2>Dermatomyositis</h2>	<ul style="list-style-type: none"> <li>- Idiopathic chronic inflammatory disease involving the skin and skeletal muscles.</li> <li><b>Pathognomonic findings:</b></li> <li>- <u>Gottron's papules</u> → erythematous to purplish flat papules on the extensor surfaces of the interphalangeal joints.</li> <li>- <u>Gottron's sign</u> → symmetric violaceous erythema ± edema, over the dorsal knuckles of the hands, elbows, knees, and medial ankles.</li> <li><b>Other findings:</b></li> <li>- Heliotrope rash → periorbital edema</li> <li>- Shawl sign → ILD</li> <li>- Calcinosis.</li> </ul>	<ul style="list-style-type: none"> <li>- History &amp; examination.</li> <li>- Progressive proximal symmetrical weakness.</li> <li>- Elevated muscle enzyme levels (creatine phosphokinase).</li> <li>- Electromyogram.</li> <li>- MRI.</li> <li>- Muscle biopsy.</li> </ul> <p><b>Serology:</b></p> <ul style="list-style-type: none"> <li>- ANA.</li> <li>- <b>Anti-Jo-1 (anti-histidyl-t-RNA synthase).</b></li> <li>- Anti-Mi-2 -&gt; good prognosis..</li> </ul>	<ul style="list-style-type: none"> <li>- Oral steroids.</li> <li>- Methotrexate.</li> <li>- Topical steroids.</li> <li>- Antimalarial.</li> <li>- Physiotherapy.</li> <li>- Surgical excision or Co2 laser.</li> </ul>	<ul style="list-style-type: none"> <li>- Diseases associated with dermatomyositis:</li> <li>- Lupus, rheumatoid arthritis.</li> <li>- Scleroderma.</li> <li>- Sjogren's syndrome.</li> <li>- Malignancies (<b>ovaries cancer</b>).</li> </ul>	

Disease		Description	Diagnosis	Management	Notes	Picture
<b>Scleroderma</b> Chronic disease that involves the microvasculature and connective tissue → fibrosis. ↑ dermal collagen & ↓ elastic tissues → typical thickening & immobility.	<b>Morphea</b>	<ul style="list-style-type: none"> <li>- Localized, Sclerotic, indurated plaques that may be solitary, multiple, linear.</li> <li>- The surface is usually smooth, with the center of the lesion a <u>whitish or ivory color</u>, whereas the border of active lesions is usually <b>violaceous</b>.</li> </ul>		<ul style="list-style-type: none"> <li>- Treatment is symptomatic.</li> </ul> <p><b>Raynaud's phenomenon:</b></p> <ul style="list-style-type: none"> <li>- Stop smoking</li> <li>- Keep hands warm.</li> <li>- Ca channel blockers (<b>nifedipine</b>)</li> <li>- Aspirin.</li> <li>- Vasodilating drugs (<b>iloprost</b>)</li> </ul>	<ul style="list-style-type: none"> <li>- They don't develop SLE.</li> </ul>	
	<b>CREST Syndrome</b>	<ul style="list-style-type: none"> <li>- C = Calcinosis cutis</li> <li>- R = Raynaud's phenomenon</li> <li>- E = Esophageal dysfunction</li> <li>- S = Sclerodactyly.</li> <li>- T = Telangiectasia</li> </ul>	<ul style="list-style-type: none"> <li>- History &amp; examination</li> <li>- characteristic skin changes.</li> </ul> Serology: <ul style="list-style-type: none"> <li>- ANA (often +ve)</li> <li>- <b>Anti-centromere antibodies (CREST)</b></li> <li>- <b>Anti-Scl-70 "anti-topoisomerase I"</b></li> </ul> <ul style="list-style-type: none"> <li>- Skin biopsy.</li> </ul>	<p><b>Calcinosis cutis:</b></p> <ul style="list-style-type: none"> <li>- Nifedipine.</li> <li>- Surgical</li> <li>- Laser excision.</li> </ul> <p><b>Skin sclerosis:</b></p> <ul style="list-style-type: none"> <li>- Physiotherapy.</li> <li>- Phototherapy.</li> </ul> <p><b>GI:</b></p> <ul style="list-style-type: none"> <li>- PPI.</li> <li>- Surgery for strictures.</li> </ul> <p><b>Kidney:</b> ACE inhibitors.</p> <p><b>In severe cases:</b></p> <ul style="list-style-type: none"> <li>- Immunosuppressant.</li> <li>- D-Penicillamine.</li> </ul>	-	
	<b>Progressive Systemic Sclerosis</b>	<ul style="list-style-type: none"> <li>- <b>Swelling of the hands and feet a ± Raynaud's phenomenon.</b></li> <li>- Telangiectasia.</li> <li>- Proximal nail fold changes.</li> <li>- Thickening and sclerotic changes involving the face &amp; extremities → Sclerodactyly, madonna fingers, Loss of normal facial lines Thinning of lips, (microstomia).</li> </ul>			<ul style="list-style-type: none"> <li>- Raynaud's Phenomenon</li> <li>- Digital ischemia due to exposure to cold and/ or emotional stress.</li> <li>- Causes</li> <li>- Rheumatic disorders.</li> <li>- Diseases with abnormal blood proteins</li> <li>- Drugs (β blockers, nicotine, cyclosporine)</li> <li>- Arterial disease.</li> </ul>	

## Hair Disorders

Disease	Description	Tests	Management	+ info	Picture
<b>Non scarring (reversible) alopecia</b>					
<b>Alopecia areata</b>	<ul style="list-style-type: none"> <li>- Immune mediated (T-cell)</li> <li>- Targeting anagen follicle.</li> <li>- Incidence 15-29, familial 50%.</li> </ul> <p><b>Patterns:</b></p> <ul style="list-style-type: none"> <li>- Round or oval patches</li> <li>- Loss of all scalp hair (alopecia totalis)</li> <li>- Loss of all body hair (alopecia universalis) -check eyebrow-</li> <li>- Ophiasis: loss of occipital hair</li> <li>- Saisapho: Sparing temporal &amp; occipital</li> <li>- Diffuse pattern: after stress or illness.</li> </ul> <p><b>Nail abnormality</b> (Nail pitting, Koilonychia, Longitudinal ridging).</p>	<ul style="list-style-type: none"> <li>- Pull test (+)</li> <li>- Trichoscopy: <b>Exclamation marks</b>, tapered hair.</li> </ul>	<ul style="list-style-type: none"> <li>- Spontaneous resolution.</li> <li>- Topical sensitizers like <b>diphencyprone</b>. Weekly application to induce mild eczematous reaction &amp; retroauricular lymphadenopathy.</li> <li>- <b>Steroids</b>: Topical, intralesional, oral ± methotrexate.</li> <li>- <b>Minoxidil</b> 2-5%.</li> <li>- <b>Anthralin</b>.</li> <li>- <b>NBUVB</b>: Risk of melanoma.</li> </ul>	<p><b>Associated diseases:</b></p> <ul style="list-style-type: none"> <li>- Atopy (allergic rhinitis, asthma, atopic dermatitis).</li> <li>- Autoimmune disease: Thyroiditis &amp; Vitiligo.</li> <li>- Down syndrome.</li> <li>- Psychiatric diseases.</li> </ul> <p><b>Bad prognostic factors:</b></p> <ul style="list-style-type: none"> <li>- Earlier age of onset.</li> <li>- Positive FHx of alopecia.</li> <li>- Extensive involvement.</li> <li>- Prolong duration &gt;5 y</li> <li>- Ophiasis.</li> </ul>	-
<b>Androgenetic alopecia (female pattern hair loss)</b>	<ul style="list-style-type: none"> <li>- Decline in hair production</li> <li>- Reduction of the anagen duration</li> <li>- 5 alpha reductase (5AR) causing miniaturization</li> </ul> <p><b>Male pattern:</b></p> <ul style="list-style-type: none"> <li>- Has 2 components: Frontotemporal recession (M shaped), Hair loss over vertex.</li> <li>- Hairs become short.</li> <li>- Total loss of hair except occipital region.</li> </ul> <p><b>Female patterned hair loss:</b></p> <ul style="list-style-type: none"> <li>- Sometimes there is history of increased hair shedding. Widening of the parting width.</li> <li>- Reduction of hair density over frontal scalp and crown.</li> <li>- <b>Frontal hairline is preserved.</b></li> </ul>	<ul style="list-style-type: none"> <li>- Pull test: Miniaturized short <b>telogen</b>.</li> <li>- Part width test: Wide over crown</li> <li>- Trichogram: <b>Telogen is more on the crown</b> than occiput.</li> </ul>	<p><b>Male:</b></p> <ul style="list-style-type: none"> <li>- Minoxidil 2% or 5% → #Scalp irritation, hypertrichosis.</li> <li>- Finasteride: Reduce incidence of prostate cancer, In females a risk of abnormal genitalia in male fetus.</li> <li>- Surgery (hair transplant).</li> </ul> <p><b>Women:</b></p> <ul style="list-style-type: none"> <li>- Minoxidil 2% and 5%.</li> <li>- Anti-androgens: Cyproterone acetate, combined with OCPs → # ↑ Weight, Fatigue, Mastodynia &amp; ↓ libido.</li> <li>- Spironolactone → #Breast soreness, menstrual irregularity, safest.</li> <li>- Flutamide: ineffective in post menopause, Hepatotoxic.</li> </ul>	<ul style="list-style-type: none"> <li>- Female patterned alopecia might be associated with PCOS, acne, hirsutism.</li> </ul>	-

Disease	Description	Tests	Management	+ info	Picture
<b>Telogen effluvium</b>	<ul style="list-style-type: none"> <li>- Premature conversion of Anagen to Telogen.</li> <li>-</li> </ul> <p><b>Types:</b></p> <ul style="list-style-type: none"> <li>- Acute (&lt; 6 months).</li> <li>- Chronic (&gt; 6 months).</li> <li>- Chronic repetitive.</li> <li>- Hair shedding starts 2 weeks after the trigger and peaks between 6-8w, and tapers in about 6-8 w.</li> <li>- Follicular regeneration is common within 4-6 months.</li> </ul>	<ul style="list-style-type: none"> <li>- Trichogram: anagen: <b>telogen</b> ratio is 70:30, Telogen is equal on different parts of the scalp</li> <li>- Empty hair follicles, minimal Miniaturized hairs.</li> <li>- Pull test is positive IF patient uses no shampoo/comb.</li> </ul>	<ul style="list-style-type: none"> <li>- Identify the triggering factor and treat it.</li> <li>- Minoxidil topically 2%.</li> <li>- Biotin 3-5mg daily.</li> <li>- L- cysteine supplement.</li> <li>- Iron &amp; vitamin D supplement.</li> </ul>	<p>Triggers:</p> <ul style="list-style-type: none"> <li>- Stress.</li> <li>- Nutritional deficiencies</li> <li>- Endocrine disorders (thyroid disease).</li> <li>- Crash diet.</li> <li>- Surgery.</li> <li>- Drugs (Heparin, Retinoid, Propranolol, Captopril).</li> <li>- Fever.</li> <li>- Childbirth.</li> </ul>	-
<b>Anagen effluvium</b>	<ul style="list-style-type: none"> <li>- Severe insult to the dermal papilla producing 80% hair loss.</li> </ul>	<ul style="list-style-type: none"> <li>- Pull test: Anagen predominant</li> </ul>	<ul style="list-style-type: none"> <li>- No treatment</li> </ul>	<ul style="list-style-type: none"> <li>- Cytotoxic drugs: Doxorubicin (Adriamycin), Cyclophosphamide Paclitaxel (Taxol) Etoposide.</li> </ul>	-
<b>Trichotillomania</b>	<ul style="list-style-type: none"> <li>- Excessive pulling of one's own hair.</li> <li>- Affects children more. (4/17 years)</li> <li>- The scalp is the most common area of hair pulling, followed by the eyebrows, eyelashes.</li> <li>- Associated with nail biting and skin picking.</li> <li>- <b>Friar Tuck sign:</b> areas of hair loss with broken hairs of varying lengths arranged in a circular pattern, with unaffected hairs surrounding the area of hair loss.</li> </ul>	<ul style="list-style-type: none"> <li>- Trichoscopy: <b>Bleeding, different hair length, black dots.</b></li> </ul>	<ul style="list-style-type: none"> <li>- Behavioral treatment.</li> <li>- A psychiatrist should be consulted.</li> <li>- SSRI (fluoxetine).</li> </ul>	<ul style="list-style-type: none"> <li>- Trichobezoars (ingestion of hair) result in intestinal obstruction, MRI and US required for diagnosis.</li> <li>- In children prognosis is good</li> <li>- In adult patients, the prognosis is poor.</li> </ul>	-
<b>Traction Alopecia</b>	<ul style="list-style-type: none"> <li>- Traction-inducing hairstyles.</li> <li>- Scarring in late stages.</li> <li>- Frontotemporal margins of scalp</li> <li>- <b>Fringe sign:</b> short terminal hairs bordering areas of marginal hair loss</li> </ul>	<ul style="list-style-type: none"> <li>- Dermoscopy:peri pilar whitish hair casts.</li> </ul>	<ul style="list-style-type: none"> <li>- Changing hair style</li> <li>- 2% minoxidil.</li> </ul>	-	-












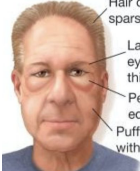
Disease	Description	Tests	Management	+ info	Picture
<b>Scarring (irreversible) alopecia</b>					
<b>Chronic Discoid Lupus</b>	<ul style="list-style-type: none"> <li>- Onset: 20 and 40 years.</li> <li>- <u>Inflammation is in the center</u></li> <li>- Presents with scaly erythematous plaques, follicular plugs, pigmentation and scarring alopecia</li> </ul>	<ul style="list-style-type: none"> <li>- Trichoscopy: erythema, scales, pigmentary changes and follicular plugs.</li> </ul>	<ul style="list-style-type: none"> <li>- Corticosteroids topically</li> <li>- intralesional injection.</li> <li>- Antimalarials.</li> </ul>	<ul style="list-style-type: none"> <li>- Hair follicles are destroyed &amp; replaced by scar tissue &amp; permanent hair loss.</li> <li>- The diagnostic hallmark of all scarring alopecia is <b>visible loss of follicular ostia</b>.</li> <li>- Compound follicles are also seen. Sebaceous gland may be central to the pathogenesis of scarring alopecia.</li> <li>- Sebaceous gland involvement is noted in lichen planopilaris and dissecting cellulitis in follicular occlusion triad.</li> </ul>	-
<b>Lichen Planopilaris</b>	<ul style="list-style-type: none"> <li>- Middle aged women.</li> <li>- Itching , pain and burning.</li> </ul>	<ul style="list-style-type: none"> <li>- Trichoscopy: perifollicular erythema &amp; perifollicular scales at the margin of the lesion.</li> </ul>	<ul style="list-style-type: none"> <li>- Antimalarials</li> <li>- Dapsone</li> <li>- Retinoids.</li> </ul>		-
<b>Dissecting Cellulitis of the Scalp</b>	<ul style="list-style-type: none"> <li>- Occurs predominantly in black males, in their second to fourth decade of life.</li> <li>- Perifollicular pustules, nodules, and abscesses, with interconnecting sinus tracts that drain pus or blood.</li> <li>- Thought to result from occlusion of the pilosebaceous unit.</li> <li>- Acne conglobata, hidradenitis suppurativa, and pilonidal cysts are frequent concomitant diseases.</li> </ul>	-	<ul style="list-style-type: none"> <li>- Oral isotretinoin is the treatment of choice.</li> <li>- Intralesional corticosteroids (eg, triamcinolone acetonide).</li> <li>- Antibiotics such as doxycycline, ciprofloxacin, rifampicin, and dapsone.</li> <li>- Biologic agents such as adalimumab and infliximab</li> </ul>		-






## Pigmentary diseases





Disease	Description	Diagnosis	Management	Notes
<b>Vitiligo</b>	<ul style="list-style-type: none"> <li>- Circumscribed depigmented macules and patches secondary to absence of functional melanocytes in vitiligo skin</li> <li>- Onset: 10-30 years.</li> <li>- Koebner phenomenon.</li> <li>- Sites → bony prominences, extensor forearm, ventral wrists, dorsal hands.</li> <li>- Leukotrichia → body hair depigmentation. (poor prognosis)</li> <li>- <b>Extracutaneous Manifestation:</b> Choroidal abnormalities, Iritis, <b>Uveitis</b>.</li> <li>- <b>Vogt-Koyanagi-Harada syndrome</b> → Vitiligo, Uveitis, Aseptic meningitis, Dysacusis, Tinnitus, Poliosis, Alopecia.</li> </ul>	<ul style="list-style-type: none"> <li>- Woods light shows <b>milky white</b> depigmentation.</li> <li>- TSH, ANA, CBC .</li> <li>- Serum antithyroglobulin and <b>antithyroid peroxidase</b> antibodies.</li> <li>- HbA1c.</li> </ul>	<p><b>Narrow-band UV-B phototherapy (311nm)</b></p> <ul style="list-style-type: none"> <li>- Safe in children, pregnant women, and lactating women.</li> <li>- #pruritus and xerosis.</li> </ul> <p><b>Psoralen photochemotherapy:</b></p> <ul style="list-style-type: none"> <li>- Widespread vitiligo. .</li> </ul> <p><b>Excimer laser (308nm):</b></p> <ul style="list-style-type: none"> <li>- &lt; 30% of the body surface. .</li> </ul> <p><b>Biologic therapy (JAK inhibitors):</b></p> <ul style="list-style-type: none"> <li>- Tofacitinib + light.</li> <li>- Topical therapy: Steroid, Tacrolimus (head and neck involvement).</li> <li>- Vitamin D analogs.</li> </ul> <p><b>Depigmentation:</b></p> <ul style="list-style-type: none"> <li>- &gt; 40% of surface area.</li> <li>- monobenzylether of hydroquinone cream is applied twice daily.</li> </ul> <p><b>Surgery:</b></p> <ul style="list-style-type: none"> <li>- Unilateral vitiligo(stable form).</li> </ul>	<p><b>Theories:</b></p> <ul style="list-style-type: none"> <li>- Autoimmune mechanisms → Thyroid disorders ( Hashimoto and Graves), Addison disease, DM, Alopecia Areata.</li> <li>- Cytotoxic mechanisms.</li> <li>- Intrinsic defect of melanocytes (Abnormal rough endoplasmic reticulum).</li> <li>- Oxidant-antioxidant mechanisms (Accumulation of free radicals).</li> <li>- Neural mechanisms (nerve injuries).</li> </ul> <p><b>Classification:</b></p> <ul style="list-style-type: none"> <li>- Localized → <b>Focal</b> (one area), <b>Segmental</b> (dermatomal pattern, poliosis), <b>Mucosal</b>.</li> <li>- Generalized → Acrofacial, Vulgaris, Mixed:</li> <li>- Universal → Associated with multiple endocrinopathy syndrome.</li> </ul> <p><b>DDX:</b></p> <ul style="list-style-type: none"> <li>- Pityriasis Alba, Post Inflammatory depigmentation, Chemical leukoderma, Vogt-Koyanagi-Harada Syndrome.</li> </ul>
<b>Melasma</b>	<ul style="list-style-type: none"> <li>- Sun-exposed areas.</li> <li>- Symmetrical tan to brown hyperpigmented macules.</li> <li>- Blue or black → dermal melasma.</li> </ul> <p><b>Patterns:</b></p> <ul style="list-style-type: none"> <li>- Centrifacial → forehead, cheeks, nose, upper lip, and chin.</li> <li>- Malar → nose and the cheeks.</li> <li>- Mandibular → ramus of the mandible.</li> </ul>	<ul style="list-style-type: none"> <li>- Woods light: accentuation of the pigmentation implying epidermal rather than dermal type of pigmentation.</li> </ul>	<ul style="list-style-type: none"> <li>- High-SPF sunscreens (50+)</li> <li>- Topical depigmenting agents: <b>Hydroxyquinone</b> (HQ) (Side effects → Phototoxic reactions, Irreversible exogenous <b>ochronosis</b>)</li> <li>- Combination treatment HQ + retinoic acid +steroid + Vit.C.</li> <li>- Azelaic acid.</li> <li>- Oral proanthocyanidin.</li> <li>- Tranexamic acid (antifibrinolytic)</li> </ul>	<ul style="list-style-type: none"> <li>- Risk factors: <b>melanocytic nevi</b> thyroid disease, female, pregnancy, OCP.</li> </ul>
<b>Freckles</b>	<ul style="list-style-type: none"> <li>- Multiple tanned macules 1-5 mm with uniform pigmentation.</li> <li>- Sun-exposed areas.</li> <li>- The macules may be discrete or confluent.</li> </ul>	-	<ul style="list-style-type: none"> <li>- Sunscreens.</li> <li>- Chemical peels, cryotherapy, and laser.</li> </ul>	<ul style="list-style-type: none"> <li>- Associated with fair skin and red or blonde hair.</li> <li>- Association with systemic disease → : Xeroderma pigmentosum, Neurofibromatosis (found in the folded regions)</li> </ul>





## Cutaneous Manifestations Of Systemic Diseases

Disease	Features	Sites	Treatment	+ info	Picture	
<b>Endocrine</b>						
<b>D I A B E T E S</b>	<b>Acanthosis Nigricans</b>	- Hyperpigmented velvety plaques.	- Body folds and creases.	- Weight reduction. - Reducing insulin resistance.	- Indicator of insulin resistance. - ↑ conc. of insulin → ↑ affinity binding to IGF-1 → stimulation of keratinocytes and dermal fibroblasts.	
	<b>Acrochordons [Skin Tags]</b>	- Small, skin colored, pedunculated papules.	- Neck, axilla, eyelids.	-	- Associated with obesity and insulin resistance, acanthosis nigricans. - Related to IGF activity.	
	<b>Diabetic Dermopathy</b>	- Red papules → atrophic, hyperpigmented papules and plaques.	- Shins.	- Blood glucose control.	- Related to diabetic neuropathic and vascular complications. - Most Common cutaneous sign of diabetes.	
	<b>Necrobiosis Lipodica Diabeticorum</b>	- Erythematous papules → evolve into yellowish brown plaques with dilated blood vessels and central epidermal atrophy. - Sometimes they ulcerate.	- Pretibial area	- Topical and intralesional steroids. - Tacrolimus. - Phototherapy, cyclosporine.	- Very rare and very characteristic. - Histopathology: granulomatous reaction.	
	<b>Bullae Diabeticorum</b>	- Spontaneous blister-like lesions.	- Hands and feet.	- Heals without scarring.	- Rare but distinct marker of diabetes.	
	<b>Scleredema Diabeticorum</b>	- Woody induration and thickening of the skin.	- Mid upper back, neck, and shoulders.	-	- Common in males [obese with longstanding uncontrolled DM with complications]. - Controlling DM DOESN'T affect the course of scleredema.	



Disease		Features	Sites	Treatment	+ info	Picture
D I A B E T E S	<b>Acquired Perforating Dermatitis</b>	<ul style="list-style-type: none"> <li>- Transepidermal elimination of collagen and elastic fibers</li> <li>- 2-10mm, firm, umbilicated, hyperkeratotic, papules.</li> </ul>	<ul style="list-style-type: none"> <li>- Trunk.</li> <li>- Extremities.</li> </ul>	<ul style="list-style-type: none"> <li>- Topical keratolytics (Urea).</li> <li>- Topical/systemic retinoids.</li> <li>- Steroids, Phototherapy</li> <li>- Antihistamines, cryotherapy.</li> </ul>	<ul style="list-style-type: none"> <li>- Associated with chronic renal failure, diabetes mellitus.</li> </ul>	
	<b>Bacterial Infections</b>	<ul style="list-style-type: none"> <li>- Staphylococcus aureus and beta-hemolytic strept.</li> </ul>	-	-	<ul style="list-style-type: none"> <li>- Corynebacterium minutissimum: → <b>Erythrasma</b>.</li> <li>- Pseudomonas aeruginosa → <b>malignant otitis externa</b>.</li> </ul>	
	<b>Fungal Infections</b>	<ul style="list-style-type: none"> <li>- Candida.</li> <li>- Tinea pedis, tinea cruris, tinea corporis, onychomycosis.</li> </ul>	<ul style="list-style-type: none"> <li>- Warm, moist folds of the skin.</li> </ul>	<ul style="list-style-type: none"> <li>- Rhinocerebral mucormycosis → Depriment + IV Amphotericin</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Rhinocerebral mucormycosis:</b></li> <li>- Extensive, life threatening.</li> <li>- Begins in the nasal passages and spreads into the orbit and cerebrum.</li> </ul>	
<b>Cushing's Syndrome</b>		<ul style="list-style-type: none"> <li>- Weight gain, Bruises easily.</li> <li>- Purple stretch marks.</li> <li>- Acne, Glucose intolerance.</li> </ul>	-	-	<ul style="list-style-type: none"> <li>- Pituitary gland → ↑ ACTH → adrenals ↑ cortisol.</li> <li>- Large doses of steroids.</li> </ul>	
<b>Addison's Disease</b>		<ul style="list-style-type: none"> <li>- Hyperpigmentation</li> <li>- <b>Oral mucous membrane hyperpigmentation is PATHOGNOMONIC.</b></li> </ul>	<ul style="list-style-type: none"> <li>- Skin.</li> <li>- Mucous membranes.</li> </ul>	-	<ul style="list-style-type: none"> <li>- Adrenocortical insufficiency.</li> <li>- ACTH binding with MELANOCORTIN 1 → Hyperpigmentation.</li> </ul>	
T h y r o i d	<b>Hyperthyroidism</b>	<ul style="list-style-type: none"> <li>- Palmoplantar hyperhidrosis.</li> <li>- Pruritus.</li> <li>- Non-scarring alopecia.</li> <li>- Plummer nails.</li> <li>- Pretibial myxedema.</li> </ul>	-	-		
	<b>Hypothyroidism</b>	<ul style="list-style-type: none"> <li>- Coarse, rough, dry skin.</li> <li>- Pallor, Pruritus.</li> <li>- <b>Carotenemia.</b></li> <li>- Diffuse hair loss.</li> <li>- Loss of 1/3 of the eyebrow.</li> <li>- Myxedematous facies.</li> </ul>	-	-	-	 <ul style="list-style-type: none"> <li>- Hair dry, coarse, sparse</li> <li>- Lateral eyebrows thin</li> <li>- Periorbital edema</li> <li>- Puffy dull face with dry skin</li> </ul>

Disease	Features	Sites	Treatment	+ info	Picture
<b>Gastrointestinal</b>					
<b>Dermatitis Herpetiformis</b>	<ul style="list-style-type: none"> <li>- Small, <b>severely pruritic</b>, clustered vesicular papules or plaques.</li> <li>- Tense subdermal blisters.</li> <li>- Lesions are cutaneous manifestation of <b>Celiac disease</b>.</li> </ul>	<ul style="list-style-type: none"> <li>- Symmetrically distributed over the <b>extensor</b> surfaces (elbows, knees, buttocks and shoulders).</li> </ul>	<ul style="list-style-type: none"> <li>- Gluten free diet.</li> <li>- <b>Dapsone</b> – 1<sup>st</sup> line.</li> <li>- Sulfapyridine- 2<sup>nd</sup> line.</li> <li>- Tetracycline (localized).</li> <li>- Nicotinamide (localized).</li> </ul>	<ul style="list-style-type: none"> <li>- Autoimmune blistering disorder.</li> <li>- Associated with a <b>Gluten Sensitive Enteropathy</b>.</li> <li>- Tissue Transglutaminase Antibodies (tTG).</li> <li>- Direct immunofluorescence → granular <b>IgA</b> in dermal papillae.</li> </ul>	
<b>Acrodermatitis Enteropathica</b>	<ul style="list-style-type: none"> <li>- Scaly erythematous patches and plaques → progress to vesicles, erosions, pustules.</li> <li>- Blisters with crustation are periorofacial.</li> <li>- When the infant is <b>weaned from breast milk</b>.</li> </ul>	<ul style="list-style-type: none"> <li>- Acral.</li> <li>- Perioral.</li> <li>- Perianal.</li> </ul>	<ul style="list-style-type: none"> <li>- Life long dietary <b>Zinc supplementation</b></li> </ul>	<ul style="list-style-type: none"> <li>- Triad of → <b>Periorificial</b>, acral dermatitis, alopecia, and <b>diarrhea</b>.</li> <li>- Autosomal recessive → zinc absorption impairment in the jejunum and ileum.</li> <li>- Acquired in alcoholics.</li> </ul>	
<b>Pyoderma Gangrenosum</b>	<ul style="list-style-type: none"> <li>- Painful ulcerative with well-defined <b>undermined violaceous border</b>.</li> <li>- Starts as a small red papule or pustule that subsequently burst and expand to form a large non-infectious ulcer.</li> </ul>	-	-	<ul style="list-style-type: none"> <li>- <b>+ve pathergy test</b> (Behcet's disease)</li> <li>- Associated with ulcerative colitis, crohn's disease, RA, and leukemia.</li> <li>- <b>Surgery is contraindicated</b>.</li> </ul>	
<b>Peutz-Jeghers Syndrome</b>	<ul style="list-style-type: none"> <li>- Hyperpigmentation (Brown macules).</li> <li>- Intestinal hamartomatous polyp</li> </ul>	<ul style="list-style-type: none"> <li>- Mucous mem.</li> <li>- Lips and buccal mucosa</li> <li>- Jejunum.</li> </ul>	-	<ul style="list-style-type: none"> <li>- Autosomal dominant.</li> <li>- ↑ risk of malignancy in younger individuals.</li> <li>- Follow up for colon cancer</li> </ul>	
<b>Porphyria Cutanea Tarda</b>	<ul style="list-style-type: none"> <li>- Photosensitivity.</li> <li>- Skin fragility after trauma → erosions and bullae.</li> <li>- Facial hypertrichosis.</li> <li>- Healing leaves <b>milium</b>, hyperpigmentation and atrophic scars.</li> </ul>	<ul style="list-style-type: none"> <li>- Sun exposed areas (hands).</li> </ul>	<ul style="list-style-type: none"> <li>- Frequently associated with hepatitis C infection.</li> </ul>	<ul style="list-style-type: none"> <li>- Inherited metabolic disorder where <b>uroporphyrinogen decarboxylase (UROD)</b> is deficient.</li> </ul>	


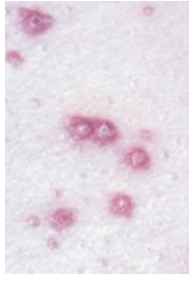

Disease	Features	Sites	Treatment	+ info	Picture
<b>Hemochromatosis</b>	<ul style="list-style-type: none"> <li>- Cutaneous pigmentation → brownish bronze or slate gray.</li> <li>- Ichthyosis, koilonychia, hair loss (pubic area) .</li> </ul>	<ul style="list-style-type: none"> <li>- Sun exposed areas (face).</li> </ul>	<ul style="list-style-type: none"> <li>- Phlebotomy.</li> <li>- Chelation Therapy.</li> <li>- Surgery Indications → End-stage liver disease/Hepatocellular carcinoma, Severe arthropathy.</li> </ul>	<ul style="list-style-type: none"> <li>- Abnormal accumulation of iron in several organs leading to organ toxicity.</li> </ul>	
<b>Renal</b>					
<b>Uremia</b>	<ul style="list-style-type: none"> <li>- <b>Xerosis</b> → acquired ichthyosis. •</li> <li>- <b>Pruritus</b> → Excoriations, prurigo nodularis, lichen simplex chronicus (scratching).</li> <li>- Half-and-half nails → dark reddish brown distal band and a white proximal band.</li> </ul>		<ul style="list-style-type: none"> <li>- <b>Xerosis</b> → routine use of emollients.</li> <li>- <b>Pruritus</b> → Sedating antihistamines, emollients, phototherapy, thalidomide, gabapentin.</li> </ul>	<ul style="list-style-type: none"> <li>- Most common <b>metabolic</b> cause of pruritus</li> </ul>	
<b>Nephrogenic Systemic Fibrosis</b>	<ul style="list-style-type: none"> <li>- Large areas of thick, indurated skin with fibrotic nodules and plaques on the</li> </ul>	<ul style="list-style-type: none"> <li>- Extremities.</li> <li>- Trunk.</li> </ul>	<ul style="list-style-type: none"> <li>- Extracorporeal photopheresis -</li> <li>- Immunosuppressive..</li> <li>- Phototherapy.</li> <li>- IVIG.</li> <li>- Topical steroids.</li> </ul>	<ul style="list-style-type: none"> <li>- Fibrosis of the skin and internal organs (similar to scleroderma).</li> <li>- Caused by <b>Gadolinium</b> exposure → imaging patients who have renal insufficiency.</li> </ul>	
<b>Hyperlipidemia</b>					
<b>Xanthelasma Palpebrarum</b>	<ul style="list-style-type: none"> <li>- Asymptomatic, and usually bilateral</li> </ul>	<ul style="list-style-type: none"> <li>- Inner canthus.</li> <li>- Upper eyelid.</li> </ul>	<ul style="list-style-type: none"> <li>- Surgical excision.</li> <li>- CO2 laser ablation.</li> <li>- Chemical cauterization (trichloroacetic acid).</li> <li>- Electrodesiccation.</li> <li>- Cryotherapy.</li> </ul>	<ul style="list-style-type: none"> <li>- Associated with any type of 1<sup>ry</sup> hyperlipoproteinemia.</li> </ul>	

Disease	Features	Sites	Treatment	+ info	Picture
<b>Tendinous Xanthomas</b>	-	<ul style="list-style-type: none"> <li>- Achilles tendon,</li> <li>- hands, feet, elbows, and knees.</li> </ul>	<ul style="list-style-type: none"> <li>- Least responsive to treatment.</li> </ul>	<ul style="list-style-type: none"> <li>- In patients with familial hypercholesterolemia</li> </ul>	
<b>Tuberous Xanthomas</b>	<ul style="list-style-type: none"> <li>- Firm non-tender, cutaneous and subcutaneous yellowish nodules.</li> </ul>	<ul style="list-style-type: none"> <li>- Extensor surfaces.</li> </ul>	<ul style="list-style-type: none"> <li>- Lipid lowering agents.</li> </ul>	<ul style="list-style-type: none"> <li>- Associated with familial dyslipoproteinemia.</li> </ul>	
<b>Eruptive Xanthomas</b>	<ul style="list-style-type: none"> <li>- Painless, yellowish papules on an erythematous base.</li> </ul>	<ul style="list-style-type: none"> <li>- Grouped lesions → trunk, elbows, and buttocks.</li> </ul>	<ul style="list-style-type: none"> <li>- Resolves in few weeks after therapy.</li> </ul>	<ul style="list-style-type: none"> <li>- Associated with hypertriglyceridemia.</li> <li>- Could be seen in poorly controlled DM and acute pancreatitis.</li> </ul>	
<b>Plantar Xanthomas</b>	<ul style="list-style-type: none"> <li>- Elevated cutaneous yellowish-orange deposits.</li> </ul>	<ul style="list-style-type: none"> <li>- Plantar creases</li> </ul>	-	<ul style="list-style-type: none"> <li>- Associated with dysbetalipoproteinemia.</li> </ul>	

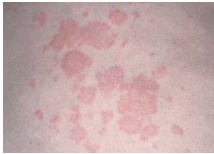


## Purpura & vasculitis






Class	Disease	Clinical features	Histology	Management	notes	Picture
<b>Cutaneous small vessel (leukocytoclastic vasculitis)</b>  - Palpable purpura is the hallmark - Do Not blanch under pressure (diascopy)	Henoch-Schonlein	<ul style="list-style-type: none"> <li>- Characterized by: purpura, arthralgias (can progress to arthritis with swelling around knees and ankles), abdominal pain (GI bleeding acute surgical abdomen, paralytic ileus) &amp; renal disease (GN &amp; renal failure).</li> <li>- Pulmonary hemorrhage can be fatal</li> <li>- Multiple palpable purpura on the extensor aspects of the extremities: lower legs, forearms &amp; buttocks.</li> </ul>	<ul style="list-style-type: none"> <li>- Perivascular infiltrate of neutrophils (nuclear dust)</li> <li>- Blood vessel wall thickening</li> </ul>	<ul style="list-style-type: none"> <li>- Supportive: D/C drug, bed rest, treat infection &amp; pain killers</li> <li>- Abdominal pain: H2 blockers, corticosteroids</li> <li>- NSAIDs are best avoided (renal &amp; GI complications)</li> </ul>	<ul style="list-style-type: none"> <li>- Triggers: viral infection, streptococcal pharyngitis, bacterial infections, foods, drugs (aspirin, penicillin), lymphoma</li> <li>- Affects children</li> <li>- IgA-mediated</li> </ul>	
	Urticarial lesions "urticarial vasculitis"	<ul style="list-style-type: none"> <li>- Urticarial vasculitis VS. urticaria:                             <ol style="list-style-type: none"> <li>1. Painful, rather than pruritic</li> <li>2. Last &gt; 24h &amp; fixed</li> <li>3. postinflammatory hyperpigmentation</li> </ol> </li> <li><b>Normal complement levels:</b> <ul style="list-style-type: none"> <li>- idiopathic</li> <li>- limited to skin</li> <li>- Self-resolving</li> </ul> </li> <li><b>Low complement levels:</b> <ul style="list-style-type: none"> <li>- leukocytoclastic vasculitis + diffuse interstitial neutrophils</li> <li>- Not limited to the skin: arthritis, arthralgia, angioedema eye symptoms, asthma, GI symptoms</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Erythrocyte extravasation</li> <li>- Fibrin deposits within the blood vessel wall</li> <li>- Endothelial necrosis (more serious illness)</li> <li>- immunoglobulin &amp; complement deposits</li> </ul>	<ul style="list-style-type: none"> <li>- Ix: CH50, C3, C4, C1q, ANA, dsDNA, Anti-SSA &amp; Anti-SSB, hepatitis, B&amp;C, lupus band test</li> <li><b>Cutaneous involvement:</b> <ul style="list-style-type: none"> <li>- NSAIDs &amp; antihistamines, if these fail &gt; Colchicine, hydroxychloroquine, dapsone</li> </ul> </li> <li><b>Systemic disease:</b> <ul style="list-style-type: none"> <li>- corticosteroids + steroid sparing agent (azathioprine, mycophenolate mofetil, rituximab)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Complement levels (CH50, C3, C4, and anti-C1q)</li> <li>- Diseases associated with urticarial vasculitis: gammopathies (IgG &amp; IgM), SLE, Sjögren syndrome, serum sickness, viral infections (HCV)</li> </ul>	
	Other	<ul style="list-style-type: none"> <li>- Idiopathic</li> <li>- Infection- streptococcal, bacterial endocarditis, parvovirus B19, HIV, hepatitis, TB</li> <li>- Drugs- NSAID, sulfonamides, penicillins, barbiturates, propylthiouracil</li> <li>- Malignancy- leukemias, lymphoma, multiple myeloma, renal, lung, prostate, breast</li> </ul>				








Class	Disease	Clinical features	Histology	Management	notes	Picture
Small-medium vessels	Churg Strauss syndrome Microscopic polyangiitis Granulomatosis with polyangiitis (GAD) Cryoglobulinemic vasculitis	-	-	-	-	-
Medium vessel	Polyarteritis Nodosa	<ul style="list-style-type: none"> <li>- Necrotizing vasculitis</li> <li>- <b>Cutaneous findings:</b> subcutaneous nodules associated with livedo reticularis that may ulcerate on the legs &amp; feet</li> <li>- <b>Peripheral neuropathy:</b> tingling, numbness, sensory disturbances, weakness and absent reflexes</li> </ul>	<ul style="list-style-type: none"> <li>- Nodular arteritis</li> <li>- Polymorphonuclear infiltration involving medium sized arteries of the deep reticular dermis &amp; subcutaneous tissue + extensive fibrinoid necrosis</li> </ul>	<ul style="list-style-type: none"> <li>- Most patients respond well to: aspirin, NSAIDs, prednisone, sulfapyridine, or methotrexate</li> </ul>	<ul style="list-style-type: none"> <li>- Has been associated with HBV &amp; HCV infection, Crohn's disease, streptococcal infections, TB, and medications (<b>minocycline</b>)</li> <li>- The only laboratory abnormality is ESR</li> </ul>	
Large vessel	Giant cell arteritis Takayasu arteritis	-	-	-	-	-
-	Vitamin C deficiency (scurvy)	<ul style="list-style-type: none"> <li>- Perifollicular petechiae</li> <li>- Keratotic plugging of hair follicles</li> <li>- Hemorrhagic gingivitis</li> </ul>	-	-	-	 

## Dermatological Emergencies

Disease	Description/ Features	Management	+ info	Picture
<b>Urticaria</b>	<ul style="list-style-type: none"> <li>- Wheals or hives.</li> <li>- Evanescent.</li> <li>- Disappear within 24 hours.</li> <li>- Blanch with pressure,</li> <li>- Intense pruritus.</li> </ul>	<ul style="list-style-type: none"> <li>- Antihistamin.</li> <li>- Systemic steroids (Severe).</li> </ul>	<ul style="list-style-type: none"> <li>- Release of mediators from mast cells → ↑ in vascular permeability.</li> <li>- Immunologic Type I (IgE mediated) or Type III.</li> <li>- Major mediator → IgE, major effector → Mast Cell.</li> <li>- Life threatening especially when associated with angioedema of the larynx.</li> <li>- Serum sickness → type III immune complex mediated reaction (Fever, Urticaria, Angioedema, Joint pain and swelling, lymphadenopathy).</li> </ul>	
<b>Angioedema</b>	<ul style="list-style-type: none"> <li>- Edema Involving the deep dermis or subcutaneous and submucosal areas.</li> </ul>	<ul style="list-style-type: none"> <li>- Non Sedating H1 antagonists. (loratadine, claritin).</li> <li>- Sedating H1 antagonists (itching).</li> <li>- Corticosteroids.</li> <li>- Epinephrine (lifesaving).</li> <li>- Hereditary Angioedema (doesn't respond to steroids) → antiandrogens (danazol), oral tranexamic acid</li> </ul>	<ul style="list-style-type: none"> <li>- Airway involvement → EMERGENCY.</li> <li>- Causes → Antibiotics, ACEI, Foods...</li> <li>- Hereditary Angioedema → autosomal dominant caused by C1 esterase inhibitor deficiency (C1 usually presents in the form of angioedema and gastric involvement without urticaria)</li> </ul>	
<b>Anaphylaxis</b>	<ul style="list-style-type: none"> <li>- Laryngeal edema, bronchospasm.</li> <li>- Erythema, pruritus, urticaria or angioedema.</li> <li>- Vomiting, cramps, diarrhea.</li> <li>- Hypotension, cardiac arrhythmia or shocks.</li> </ul>	<ul style="list-style-type: none"> <li>- ABCs.</li> <li>- Epinephrine.</li> <li>- Antihistamine.</li> </ul>	<ul style="list-style-type: none"> <li>- Within minutes to hours, severe may be fatal.</li> <li>- <b>IgE mediated</b>.</li> <li>- Causative agents: Drugs, Foods, Vaccines and Antisera.</li> </ul>	
<b>Erythroderma &amp; Exfoliative Dermatitis</b>	<ul style="list-style-type: none"> <li>- Erythema with or without scales</li> <li>- Affecting &gt;90% of the body.</li> <li>- It's common in extreme of ages</li> </ul>	-	<ul style="list-style-type: none"> <li>- Complication → Hypothermia, fluid and electrolyte loss, infection.</li> <li>- Drug Etiology: Sulphonamides, antimalarials, penicillin, phenytoin.</li> <li>- Other causes → psoriasis, cutaneous T-cell lymphoma.</li> </ul>	

Disease	Description/ Features	Management	+ info	Picture
<b>Erythema multiforme</b>	<ul style="list-style-type: none"> <li>- Target lesions</li> <li>- little or no mucosal involvement (EM minor),</li> <li>- Fever , arthralgia ,sore throat.</li> </ul>	<ul style="list-style-type: none"> <li>- Acyclovir.</li> </ul>	<ul style="list-style-type: none"> <li>- Follow an infection by HSV.</li> </ul>	
<b>Steven Johnson Syndrome</b>	<ul style="list-style-type: none"> <li>- Mucous membrane erosions.</li> <li>- <b>&lt; 10% BSA of epidermal detachment.</b></li> <li>- Subcorneal blister</li> </ul>	<ul style="list-style-type: none"> <li>- Corticosteroids (early in the disease for a short period of 3-5 days).</li> </ul>	<ul style="list-style-type: none"> <li>- Severe form of EM (5% mortality).</li> <li>- Causes: Mycoplasma pneumonia infection, drugs (50%).</li> <li>- Histopath → splitting at the level of the subcorneal epidermal layer.</li> </ul>	
<b>Toxic Epidermal Necrolysis</b>	<ul style="list-style-type: none"> <li>- Severe mucosal involvement in conjunctiva and the eye</li> <li>- <b>&lt; 30% BSA of epidermal detachment.</b></li> </ul>	<ul style="list-style-type: none"> <li>- Withdrawal of suspected drug.</li> <li>- Patient cared in a burn unit or I.C.U.</li> <li>- Replacement of I.V. fluids and electrolytes.</li> </ul>	<ul style="list-style-type: none"> <li>- Severe form of SJS (30% mortality), major cause of death: Septicemia, electrolyte imbalance.</li> <li>- Causes: Drugs (95%) → anticonvulsants, <b>sulphonamides</b>, allopurinol, NSAID, carbamazepine.</li> <li>- Risk factors: Slow acetylators, Immunosuppression (HIV, Lymphoma) → acquired <b>glutathione deficiency</b>, HLAB1502.</li> <li>- Histopath → all the epidermis is removed</li> <li>- DDX: Pemphigus vulgaris.</li> </ul>	
<b>Kawasaki Syndrome</b>	<ul style="list-style-type: none"> <li>- Fever &gt; 5 days,</li> <li>- Conjunctivitis.</li> <li>- Red fissured lips, strawberry tongue.</li> <li>- Rash - erythema exanthem</li> <li>- Edema of palms and soles.</li> <li>- Cervical lymphadenopathy.</li> <li>- <b>Coronary artery aneurysms.</b></li> </ul>	<ul style="list-style-type: none"> <li>- <b>IV aspirin.</b></li> <li>- <b>Immunoglobulin,</b></li> </ul>	<ul style="list-style-type: none"> <li>- Affects children.</li> <li>- Complications → CAD and heart problem.</li> </ul>	
<b>Drug Eruptions</b> (most sensitizing root is topical)				
<b>Maculopapular</b>	<ul style="list-style-type: none"> <li>- Exanthematous.</li> <li>- Morbilliform</li> <li>- No pustule, vesicle , blister.</li> </ul>	-	<ul style="list-style-type: none"> <li>- Seen in children on antibiotic( cefaclor).</li> </ul>	

Disease	Description/ Features	Management	+ info	Picture
<b>Hypersensitivity Syndrome Reaction</b>	- Triad of fever, skin eruption and internal organ involvement.	-	- Life threatening syndrome. - <b>Anticonvulsants</b> , sulfonamide, dapson, allopurinol, Azathioprine, Minocycline.	
<b>Latex Allergy</b>	- Contact Urticaria, Fatal Anaphylaxis	-	- Type 1 reaction to natural rubber latex. - Foods that cross react with latex proteins → Banana, Kiwi, Avocado, Chestnuts.	
<b>Fixed Drug Eruptions</b>	- Dark brown , grayish , round well demarcated. - Pigmented or inflammatory in the form of blistering.	-	- Drug reaction that happens immediately. - In males in the form of a blister in the glans penis. - Young males on minocycline for acne.	
<b>Lichenoid Eruptions</b>	- Resembles lichen planus. - <b>Violaceous</b> , scaly , papules , diffuse , mucosal.	-	- Psoriasiform → with lithium , BB, anti- malarial	
<b>Photosensitivity</b>	-	-	- Photoxic → non-immune mediated more of an irritation e.g. psoralen , doxycycline for acne. - Photoallergic.	
<b>Drug induced Pemphigus</b>	- The more superficial the more crustaceans.	-	- Superficial pemphigus (foliaceus). - Classical drug causing it is penicillamine and ACEI. - Separation (intraepidermal) above the basement membrane . - In bullous pemphigoid → Tense blister because the split under the epidermis (subepidermal.)	
<b>Lupus Erythematosus-like syndrome</b>	-	-	- Causes → <b>Hydralazine</b> , <b>procainamide</b> , sulfonamide, Minocycline, INH. - Antihistone Antibodies.	
<b>Erythema Nodosum</b>	-	-	- Due to inflammation of subcutaneous fat (panniculitis). - Causes: <b>TB</b> , penicillin, tetracycline, OCP.	

Disease	Description/ Features	Management	+ info	Picture
<b>Blistering Diseases</b>				
<b>Pemphigus</b>	<ul style="list-style-type: none"> <li>- Flaccid blisters intraepidermal.</li> <li>- Weeping painful erosions.</li> <li>- Sloughing of the intact skin next to the blister.</li> <li>- Positive Nikolsky's sign.</li> <li>- Positive asboe - Hansen sign or (bulla spread sign).</li> <li>- Acantholysis.</li> <li>- Intra-epidermal cleft.</li> </ul>	<ul style="list-style-type: none"> <li>- Systemic corticosteroids..</li> <li>- Immunosuppressive therapy (Azathioprine, Mycophenolate, Mofetil).</li> <li>- IVIG → resistant cases.</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Vulgaris:</b> IgG autoantibodies attack desmosomplyin → detachment of keratinocytes → floating of cells.</li> <li>- <b>IgG and C3</b> in the intercellular space of epidermis.</li> <li>- Age - sixth decade of life.</li> </ul> <p><b>Classification:</b></p> <ul style="list-style-type: none"> <li>- Vulgaris → skin and mucous membrane involvement.</li> <li>- Vegetans, Foliaceus.</li> <li>- Fogoselvagem → black fly insect pits.</li> <li>- Paraneoplastic → chronic lymphocytic leukaemia.</li> </ul>	
<b>Pemphigoid</b>	<p><b>Bullous Pemphigoid:</b></p> <ul style="list-style-type: none"> <li>- Large bullae on erythematous plaques or normal appearing skin.</li> <li>- No or only mild involvement of mucous membrane.</li> <li>- Sub-epidermal tense blister. So it's tense (lower abdomen, groin, flexors of Arms &amp; legs).</li> <li>- Negative Nikolsky's sign</li> </ul>	<ul style="list-style-type: none"> <li>- Systemic: Steroid.</li> <li>- Antibiotics: Tetracycline, Minocin.</li> <li>- Dapsone.</li> <li>- Immunosuppressive therapy (Azathioprine, Mycophenolate, Mofetil).</li> </ul>	<ul style="list-style-type: none"> <li>- Autoimmune subepidermal blistering disorders with circulating <b>IgG</b> and basement membrane zone (BMZ)-bound IgG antibodies (ABS) and <b>C3</b>.</li> <li>- Diagnosis: CBC: Eosinophilia, IgE., HIST, <b>DIF</b></li> </ul>	
<b>Pemphigoid gestationis:</b>	<ul style="list-style-type: none"> <li>- Erythematous urticarial Plaques, alone or with papules, vesicles, blisters, erosions (abdomen, proximal extremities).</li> <li>- Intense pruritus.</li> <li>- <b>Subepidermal</b> blister</li> </ul>	<ul style="list-style-type: none"> <li>- Potent steroids (avoid the systemic in the 1<sup>st</sup> tri).</li> <li>- Topical drugs, drying agents and antiseptic</li> </ul>	<ul style="list-style-type: none"> <li>- Resemble herpes because its vesicular.</li> <li>- C3, IgG at BMZ, H.G. Factor in Patient's Sera.</li> <li>- Starts at the 2<sup>nd</sup>, 3<sup>rd</sup> trimester.</li> <li>- Flares at postpartum, OCP .</li> <li>- Purely anti-HLA antibodies from the paternal placenta.</li> </ul>	