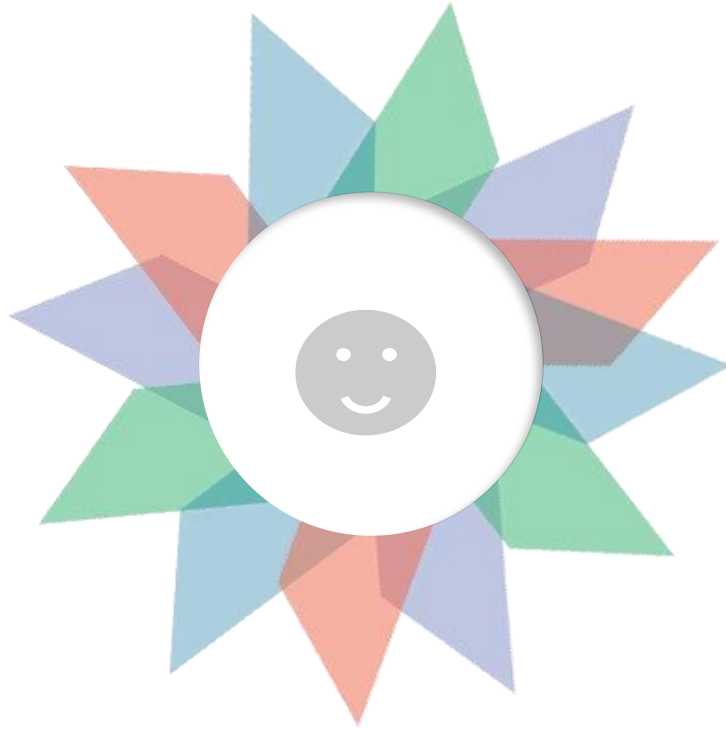




SKINCARE COURSE: UNIT 1

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Welcome!!

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Types**

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Eczema: Part 2



Types, Treatment



Eczema

Types of Eczema

01

Atopic dermatitis

This is a very common type of eczema, often beginning in childhood. It usually develops by 5 years of age and causes extremely itchy rashes that come and go.

02

Contact dermatitis

This occurs when something that touches your skin either irritates it or causes an allergic skin reaction. The first sign is often itchy skin, followed by a rash. You may also see blisters. Very common type of eczema.

02

Seborrheic dermatitis

A common, chronic, or relapsing form of eczema/dermatitis that mainly affects the sebaceous gland-rich regions of the scalp, face, and trunk. Dandruff is an uninfamed form of seborrhoeic dermatitis on the scalp.

04

Dyshidrotic eczema

Tiny blisters on hands, feet, or both is one sign of this type of eczema. It is also called pompholyx. The blisters may last for three to four weeks before clearing. Some people never develop blisters again. Dyshidrotic eczema can also be a lifelong, debilitating disease.

05

Neurodermatitis

Also known as lichen simplex chronicus. It starts with an itchy patch of skin. Scratching makes it itch more. With more scratching, the skin becomes thick and leathery. May develop several itchy spots, typically on the neck, wrists, forearms, legs or groin area.

06

Nummular eczema

Also known as Discoid eczema or discoid dermatitis, is a chronic skin condition that causes skin to become itchy, swollen and cracked in circular or oval patches.

Eczema

Treatments for Types of Eczema

01

Atopic dermatitis

Treatment plan involves using skincare, trigger management and medication or light therapy as needed. Using a fragrance-free moisturizer within a few minutes of bathing helps to lock moisture into the skin and reduce dryness.

02

Contact dermatitis

Finding out what irritates the skin or causes an allergic reaction, treating the itchy skin (1% hydrocortisone cream), helping their patients avoid what causes the contact dermatitis. Only by avoiding the cause can you get rid of contact dermatitis.

03

Seborrheic dermatitis

Keratolytics: used to remove scale when necessary, eg. salicylic acid, lactic acid, urea, propylene glycol.

Topical antifungal agents: applied to reduce *Malassezia* eg. ketoconazole or ciclopirox shampoo and/or cream. Some strains of *Malassezia* are resistant to azole antifungals. Zinc pyrithione or selenium sulphide is an alternative.

Mild topical corticosteroids: for 1–3 weeks to reduce the inflammation of an acute flare.

Topical calcineurin inhibitors: (pimecrolimus cream, tacrolimus ointment) are indicated if topical corticosteroids are needing to be used frequently, as they have fewer adverse effects on facial skin with long term use.

In resistant cases in adults, oral itraconazole, tetracycline antibiotics, or phototherapy may be recommended. Low-dose oral isotretinoin has also been shown to be effective for severe or moderate disease.

Eczema

Treatments for Types of Eczema

04

Dyshidrotic eczema

Treatment plan involves using moisturizing lotion or cream to treat dry skin, steroid ointment and calcineurin creams to reduce inflammation, oral steroid for more severe symptoms, draining of very large blisters to reduce pain, Treatment with psoralen and ultraviolet light (PUVA) for chronic, severe symptoms. More targeted injectable biologic medicines such as dupilumab have been approved for treating eczema. Using a moisturizing lotion or cream every day helps to treat skin dryness as the blisters heal.

05

Neurodermatitis

To relieve the itchy skin a corticosteroid can be applied or injected to the affected area. It helps reduce the swelling, heat, itch, and tenderness. Applying a cool compress or soaking the area in water for 5 minutes before you apply a corticosteroid can help the medicine penetrate thickened skin more easily and reduce the itchiness. Antihistamine can relieve the itch and help you sleep. Using a moisturizer to hydrate and help itching. Coal tar preparation can be applied to the skin or added to the bath. Capsaicin cream or doxepin cream may decrease the itch as well.

Eczema

Treatments for Types of Eczema

06

Nummular eczema

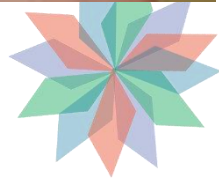
Moisturizer plays a key role in healing your skin. Dermatologist may recommend a hypoallergenic, fragrance-free moisturizing cream or ointment. Since dry, sensitive skin is more likely to have frequent flare-ups of nummular eczema, the treatment plan may include tips to help avoid irritating the skin such as only using fragrance free, gentle cleansers to wash skin and wearing loose fitting cotton clothing. To clear the eczema, a dermatologist may prescribe medication or light treatments such as corticosteroid ointment, Tacrolimus ointment or pimecrolimus cream, Tar cream; all of which reduce inflammation and itch. Applying the medication to damp skin immediately after bathing can help the medication heal your skin more quickly. For widespread spots and patches, medicated dressings or oral or injectable corticosteroid medication may be prescribed. Phototherapy may be an option for some persons with nummular eczema. An antihistamine can be taken if the itch keeps the patient awake, since antihistamines can make you drowsy.



Keratinising and Papulosquamous Disorders



Psoriasis, Lichen planus, Pityriasis rosea



Keratinising and Papulosquamous Disorders

What are Papulosquamous Disorders?

The term 'squamous' refers to scaling in the stratum and implies an abnormal keratinization process. Keratinization is the process in which the outermost cells of the epidermis in vertebrates are replaced by cells containing keratin. This process occurs in the stratum corneum layer of the skin.

Papulosquamous diseases are group of disorders characterized by scaly papules and plaques:

- Psoriasis.
- Lichen planus
- Pityriasis rosea
- Pityriasis rubra pilaris.
- Secondary syphilis.

*For this course, we will only be expanding on the first 3 disorders listed.

Keratinising and Papulosquamous Disorders

01

Psoriasis

Psoriasis is a chronic skin condition that presents in a variety of ways. It is a genetic condition triggered by environmental factors such as infection, medications, stress and trauma. It is characterized by exaggerated and disordered epidermal cell proliferation and keratinization. Typical lesions are well-defined erythematous, indurated papules, and plaques with white or silvery scale. It may also involve the nails and joints.

It is thought to be a T-lymphocyte-mediated autoimmune disease. The skin lesions of psoriasis are characterized by cells multiplying much more quickly than normal (epidermal hyperproliferation), cells that do not mature normally (abnormal keratinocyte differentiation), and the presence of proinflammatory cells (a lymphocyte inflammatory infiltrate).

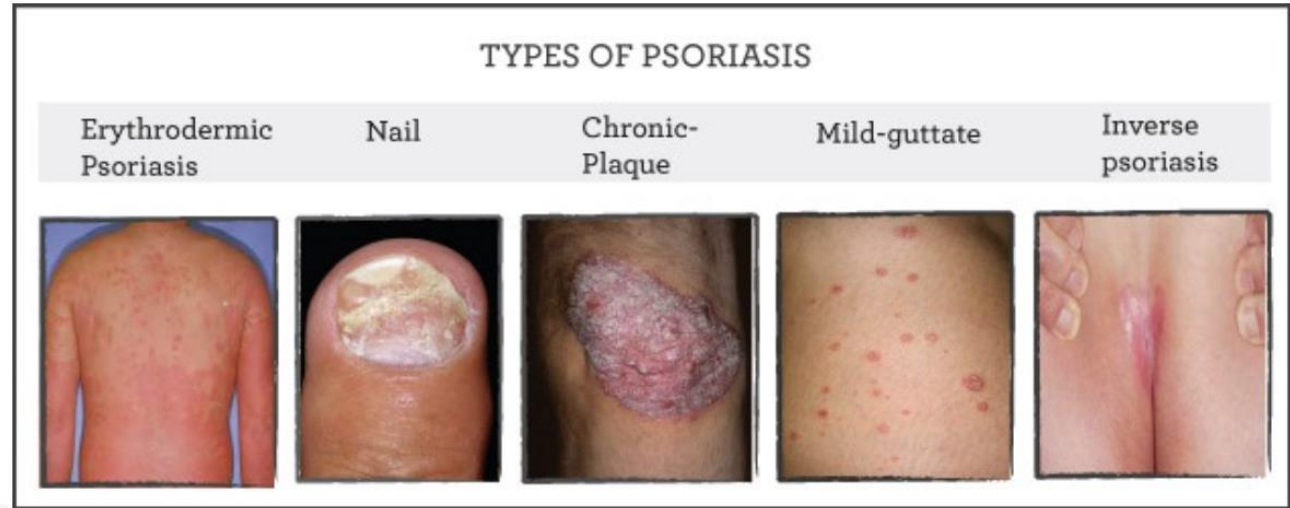
This disorder affects about 1% to 3% of the population worldwide. It is seen equally in men and women, and people of all races are affected but is more frequent in countries farther from the equator. It is a multifactorial and polygenetically inherited disease. If one parent is affected, 8% of children will develop psoriasis. If both parents are affected, then 41% of children develop psoriasis.

Age at onset ranges from infancy to the end of life. Psoriasis commonly peaks at two different times across the life span (early peak is between 20 and 30 years and late peak is 50 and 60 years). Early onset usually leads to a more severe course of the disease.

Keratinising and Papulosquamous Disorders

Types of Psoriasis

- Plaque psoriasis (psoriasis vulgaris)
- Guttate psoriasis
- Inverse psoriasis
- Pustular psoriasis
- Erythrodermic psoriasis
- Psoriatic arthritis
- Psoriatic nail
- Scalp psoriasis



*please refer to the link attached for clinical features and treatment of the types of psoriasis! ☺

<https://nursekey.com/papulosquamous-diseases/>

Keratinising and Papulosquamous Disorders

02

Lichen planus (LP)

This can be either an acute or a chronic inflammatory disease of the skin, mucous membranes, hair, and nails. It may be idiopathic or caused by a drug, contact allergen, or viral infection (hepatitis B or C). Classic cutaneous lichen planus is often described using the five Ps—purple, polygonal, pruritic, planar, and papules.

LP is reported in approximately 1% of all new patients seen at health care clinics in US. And is seen equally in both men and women. It is rare in children but can occur at any age. More than two thirds of patients are aged 30-60 years.

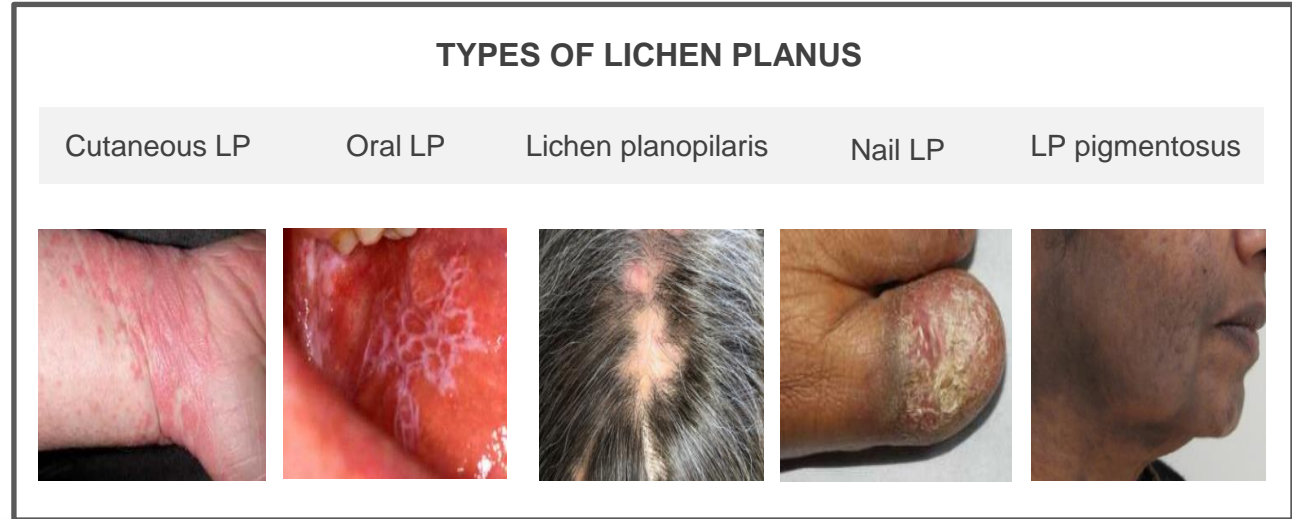
Causes of LP include: a cell-mediated immune response of unknown origin (Hyper Reactive immune Response), association with other diseases of altered immunity (UC, alopecia areata, vitiligo, DM, morphea), association between LP and hepatitis C virus and primary biliary cirrhosis, genetic predisposition/ familial cases, stressful events and drug induce lichenoid reaction like thiazide, antimalarials and propranolol.

Some clinical features include purple papules that are shiny flat-topped and polygonal and varying in size. They can be discrete or arranged in groups of lines or circles and have a characteristic fine, white lines on the papules (Wickham striae). LP is most commonly found on flexors of wrist and legs.

Keratinising and Papulosquamous Disorders

Types of Lichen Planus

- Cutaneous lichen planus
- Mucosal lichen planus
- Lichen planopilaris
- Lichen planus of the nails
- Lichen planus pigmentosus
- Lichenoid drug eruption.



*please refer to the link attached for clinical features and treatment of the types of LP! ☺

<https://dermnetnz.org/topics/lichen-planus>

Keratinising and Papulosquamous Disorders

03

Pityriasis rosea

Pityriasis rosea is a self-limiting rash, which resolves in about 6–10 weeks. It is characterised by a large circular or oval "herald patch" 2–5 cm in diameter, usually found on the chest, abdomen, or back. The herald patch is followed some time later, typically two weeks or so, by the development of smaller scaly oval red patches distributed mainly on the chest and back.

Pityriasis rosea is most common in teenagers and young adults (10–35 year-olds), however it can affect people of any age. It occurs very slightly more often in women and most cases occur in winter. Its exact cause is not known. Viral, bacterial, and non-infective causes have been hypothesised. Herpesviruses 6 and 7 (HHV-6/7) have the strongest known association, however this still needs to be confirmed via studies.

Other viral infections, such as H1N1 influenza A and COVID-19, may also be causative. Many drugs have been associated, such as angiotensin-converting enzyme inhibitors, nonsteroidal anti-inflammatory drugs, hydrochlorothiazide, gold, captopril, atypical antipsychotics barbiturates, D-penicillamine, imatinib, metronidazole, isotretinoin, clozapine, and clonidine.

Pityriasis rosea may be triggered by the Bacillus Calmette-Guerin (BCG), H1N1, diphtheria, smallpox, hepatitis B, Pneumococcus, and COVID-19 vaccines.

Except for mild to severe itching in up to 25% of patients, no systemic symptoms are typically present during the rash phase of pityriasis rosea. A few days before the rash develops, up to 69% have flu-like symptoms eg, cough or sore throat.

Keratinising and Papulosquamous Disorders

Pityriasis rosea Images

PITYRIASIS ROSEA

Herald Patch



Oval Scaly Patches



Oval Scaly Patches
on Darker Skin



*please refer to the link attached for treatment of Pityriasis rosea! 😊

<https://dermnetnz.org/topics/pityriasis-rosea>



Skin Infections

Cellulitis, Impetigo, Folliculitis, Furuncles and Carbuncles

Skin Infections

Cellulitis, Impetigo, Folliculitis, Furuncles and Carbuncles.

Common Bacterial Skin Infections

Cellulitis, impetigo, and folliculitis are the most common bacterial skin infections seen by family physicians.

Cellulitis is an infection of the dermis and subcutaneous tissue that has poorly demarcated borders and is usually caused by Streptococcus or Staphylococcus species.

Impetigo is also caused by Streptococcus or Staphylococcus and can lead to lifting of the stratum corneum resulting in the commonly seen bullous effect.

Folliculitis is an inflammation of the hair follicles. When the infection is bacterial rather than mechanical in nature, it is most commonly caused by Staphylococcus. If the infection of the follicle is deeper and involves more follicles, it moves into the furuncle and carbuncle stages and usually requires incision and drainage.

All of these infections are typically diagnosed by clinical presentation and treated empirically. If antibiotics are required, one that is active against gram-positive organisms such as penicillinase-resistant penicillins, cephalosporins, macrolides, or fluoroquinolones should be chosen.

Skin Infections

Cellulitis, Impetigo, Folliculitis, Furuncles and Carbuncles

BACTERIAL SKIN INFECTIONS

Cellulitis



Impetigo



Folliculitis



***please refer to the link attached for more details on these skin infections! ☺**

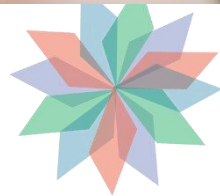
<https://www.aafp.org/pubs/afp/issues/2002/0701/p119.html#:~:text=Common%20skin%20infections%20include%20cellulitis,by%20Streptococcus%20or%20Staphylococcus%20species.>



Remedies for Acne Prone Skin



Treatments and Products for Acne Prone Skin



Remedies for Acne-Prone Skin

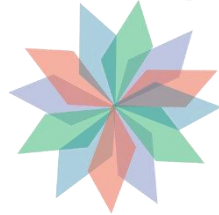
Treatments and Products for Acne-Prone Skin

Acne-Prone Skin

A skincare routine for acne-prone skin should include ingredients that treat acne, most of which can be drying so it is pertinent that one's routine also includes ingredients that nourish, hydrate and help maintain the skin's protective barrier. The following ingredients are excellent for acne prone skin:

- **Benzoyl Peroxide** – minimizes acne-causing bacteria
- **Retinol/Retinoids** – increases cell turnover, mildly exfoliates the skin, improves skin's texture, unclogs pores, regulates sebum production
- **Salicylic Acid** – prevents pores from becoming clogged with oil and dead skin cells.
- **Niacinamide** – oil controlling, antioxidant, antibacterial, anti-inflammatory, hydrating. Studies show that it is effective as an acne treatment once used at a concentration of 5% or lower, especially if skin is irritated..
- **Green Tea** – antioxidant, anti-inflammatory, antibacterial, oil-controlling, particularly good at treating inflammatory acne
- **Centella Asiatica** – hydrates, encourages the production of antioxidants in skin, reduces inflammation, controls bacteria, improves wound healing, improves PIE

*More on acne in unit 3!



Seasonal Skin Care

What Products to Use During the Wet and Dry Seasons

Seasonal Skin Care

What Products to Use During the Dry Season



01

Dry Season

With warmer climates comes added humidity in the air. These elevated temperatures can trigger the body's biological processes and, in response to heat and humidity, the body works to cool itself down.

When in heat, sebaceous glands on your body start to secrete more sebum and this can leave skin appearing oily. Using a light weight moisturizer that absorbs in seconds and instantly making skin soft with a non-greasy finish is recommended.

On the other hand, warmer weather also tends to mean more time in the sun, and harsh UV rays can burn and dry skin. To calm and soothe dry skin, try products that contain aloe vera, glycerin and green tea.

Exfoliating the skin to remove dead cells and reveal new, healthier-looking skin is important during this season. Salicylic acid and glycolic acid can be used to unclog pores and brighten skin. Using an antioxidant like Vitamin C to protect the skin from environmental stressors is recommended as well.

It is most important to wear sunscreen during this season, with an SPF of at least 30 and ensuring to reapply every two hours for maximum protection.

Seasonal Skin Care

What Products to Use During the Wet Season



02

Wet Season

When temperatures fall, so too do the levels of moisture in the air. Skin can become dry and irritated against the harsh elements of colder climates. Using a rich moisturizer, one that contains ingredients like squalane, snail mucin, ceramides or any hydrating facial oil will prevent the skin from getting too dry and strengthen the skin barrier.

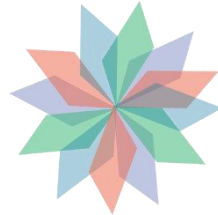
Using an exfoliant like lactic acid can help with the dullness that tends to occur with dry skin while also hydrating the skin.

SPF protection should be worn year-round, even if one is not exposed to direct sunlight or is indoors.



Effects of the Sun and Its' Remedies

Dangers of UV Rays and How to Protect Against Them



Effects of the Sun and Its' Remedies

Effects of the Sun

Sun exposure is required by everyone to produce vitamin D (which helps calcium absorption for stronger and healthier bones). But unprotected exposure to the sun's ultraviolet (UV) rays can cause damage to the skin, eyes, and immune system. This damage can lead to skin cancer or premature skin aging (photoaging). It can also cause sun spots and hyperpigmentation on the face.

UV Rays

Energy from the sun reaches the earth as visible, infrared, and ultraviolet (UV) rays. Ultraviolet A (UVA) is made up of wavelengths 320 to 400 nm, Ultraviolet B (UVB) wavelengths are 280 to 320 nm. Only UVA and UVB reach the earth's surface. UVB rays cause a much greater risk of skin cancer than UVA but UVA rays cause aging, wrinkling, and loss of elasticity. UVA also increases the damaging effects of UVB, including skin cancer and cataracts.

In most cases, ultraviolet rays react with melanin. This is the first defense against the sun. Melanin absorbs the dangerous UV rays. A sunburn develops when the amount of UV damage exceeds the protection that the skin's melanin can provide. A suntan represents the skin's response to injury from the sun.

Effects of the Sun and Its' Remedies

How to Protect Skin from The Sun

- A broad-spectrum water-resistant sunscreen with an SPF of at least 30 should be applied to all exposed skin. Broad spectrum means the sunscreen protects you from both UVA and UVB rays. The sunscreen should be reapplied about every 2 hours.
- Wearing protective clothing such as a long-sleeved shirt, pants, a wide-brimmed hat, and sunglasses should be done whenever possible.
- Getting enough vitamin D either from a healthy diet or vitamin supplements.
- Not using tanning beds. Ultraviolet light from the sun and tanning beds can cause skin cancer and wrinkling
- Protecting your lips with lip balm with at least SPF 15
- Wearing protective eyewear (sunglasses with UV protection)

Thank you

