

Dermatology

Eczema and Dermatitis

The terms eczema & dermatitis are used interchangeably

Eczema is an acute condition, the rashes produced have similar features but the distribution on the body varies and can be diagnosed. It is typically present as dry flaky skin, inflamed and have small red spots. The skin may be cracked, thickened & itchy.



In mild eczema, the sufferers have associated hay fever & or asthma & there is often a family history. It is usually worsened during the hay fever season by house dust or animal dander's. Factors which dry the skin such as soap, detergent & cold wind can aggravate it. Woolen material, antiseptic solution, food such as milk & egg also implicated. Emotional factors & stress exacerbate eczema.

Dermatitis mostly used when an external precipitating factors irritate the skin or spark off an allergic reaction.

Dermatitis disorders also called contact dermatitis are characterized by sore, red itching skin that can be classed as acute , sub acute or chronic in nature . Patient may present with lesions that are in more than one phase at the time .



A number of types of dermatitis are present including :

- **1) Irritant contact dermatitis :**

Caused by direct exposure to substances that have damaging effect to the skin. Dermatitis occurs soon after exposure & the severity varies with the type of irritant , the concentration and quantity involved & the length of exposure.

for example strong acids & alkaline substances may even produce ulceration , whereas ultraviolet radiation cause a prickly – heat of dermatitis & may appear 6-12 hr of exposure .

- Other substances which can irritate the skin include: cleansing agents (alkaline in nature), oxidizing agent, and detergents.



- **Clinical features of irritant contact dermatitis**

- The lesions appear red & sometime brown in color with itching (itching is prominent feature) , it causes a patient to scratch , which result in broken skin with subsequent weeping. The skin often exhibits scaling & dryness as the condition persists.

2) Allergic contact dermatitis :

It is due to sensitization reaction. It is present in same manner as irritant contact dermatitis , occurs only in patients whose skin has previously been sensitized by contact with an allergen, that triggers memory T- cell to initiate an inflammatory response. Re – exposure might occur days or years after initial exposure.

- * The site of involvement provides a major clue as to the identity of the allergen for example ear lobes & neck (nickel in jewelers), wrist (leather or metal of watch straps).
- * Other allergic substances include: cement and paint, resins in adhesive plasters, dyes, eye make up & medication like topically applied local anesthetics .



Management: It is the same regardless of the form of dermatitis the person has , and since all form cause redness, drying of the skin , irritation & pruritis to a varying degree , therefore treatment should include the three steps:

Managing the itch,
avoiding irritants &
maintaining skin integrity.

***Non- pharmacological intervention** : include avoidance of the causative agent which is sometimes difficult.

Sweating intensify the itching so keep the person cool.

A cotton & loose fitting clothing should worn.

***Pharmacological treatment** include:

a combination of emollients & steroid products.

Emollients :

These are medically inert creams & ointments , used to soothe the skin, reduce irritation & prevent the skin from drying & acts as a protective layer.

Emollient preparations should be used as often as is needed to keep the skin hydrated & moist. Several & frequent applications each day may be required.

In general patient respond to a thicker emollient rather than an elegant cosmetic brand because these allow greater retention of water e.g 50% liquid paraffin & 50% white soft paraffin.

A cream formulation are more accepted by patients than ointment, it is easier & less messy to use.

Antipruritics : like aqueous calamine + 1% menthol to give additional antipruritic & cooling action.

Crotamiton , another antipruritic present in combination product with hydrocortisone.

Steroids:

Topical hydrocortisone (cream & ointment) & Clobetasone (cream & ointment).

Both have an efficacy in treating dermatitis & should be considered 1st line treatment. Once symptoms are controlled then the patient should be instructed to be back to emollient therapy.

Some restrictions to its use:

The patient must be aged over 10 for hydrocortisone & 12 for Clobetasone.

Duration of treatment is limited to a maximum of one week & should not be used on facial skin, broken or infected skin.

Despite this restriction for use, a minimal SE is obtained when used for short term. It can be used for all patients including pregnant women.

Clobetasone is classed as moderately potent, whereas hydrocortisone is classed as mild, so it is sensible to reserve Clobetasone for more severe flare-ups of dermatitis, or for those patients in whom hydrocortisone had in the past failed to control symptoms. Both applied twice daily.

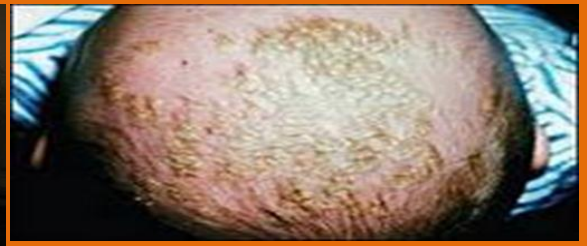
Seborrhoeic Dermatitis

There are two types of seborrhoeic dermatitis, an infantile & adult form. It is characterized by an increased cell turnover rate (shedding of dead skin cells). The causes may also be hormonal & nutritional in origin & like dandruff, a pityrosporum ovale is implicated as an etiological agent & there is usually a +ve response to the use of antifungal therapy.

Diagnosis: An infantile seborrhoeic dermatitis, is more prevalent than the adult form. It started in infancy before the age of six months (new born), usually self limiting. It appears as large yellow scales & crusts on the scalp, face & napkin area.

It is not itchy in nature (important for differential diagnosis).

It can be confused with (atopic dermatitis), which is rare before 3 months of age.



The adult form tend to be chronic & persistent. Men are more likely to suffer than women. It is characterized by a red , mildly scaly rashes that typically affect the central part of the face scalp, eyebrows, eyelids & mid chest.



Treatment of seborrhoeic dermatitis

Olive oil can be applied to the scalp & should left for over night , followed by using a non – medicated shampoo the next morning.

If fail ,a medicated shampoo contain lauryl ether sulphosuccinate could be tried on alternate days until the condition is controlled & if this fail then referral is necessary .

In adults, OTC preparations are often inadequate & a topical steroid therapy is necessary .