Dr.Fatima Al-zubaidi

## Acne Continue…

## Management:

### B- Retinoids

**Adapalene, tretinoin and isotretinoin** are topical retinoids that are commonly prescribed by the doctor or skin specialist. Differin Gel 0.1% (adapalene) is the first in a class of retinoids to be made available **OTC for the treatment of acne vulgaris in patients 12 years of age** and older. Retinoids increase turnover of skin cells, removes dead cells from skin surface and reduces inflammation.

They can cause skin irritation, particularly in people with eczema, but most importantly they are contraindicated in pregnancy. Retinoids are teratogenic and can damage the developing baby. Adapalene is photoirritants, and sun avoidance and sunscreen use are important. Fixed dose combination products should be used first-line e.g. adapalene with benzoyl peroxide or tretinoin with clindamycin

### C-Nicotinamide

Topical nicotinamide gel is applied twice daily it has anti-inflammatory, sebostatic effect. There is limited evidence of effectiveness. Side effects may include skin dryness and/or irritation. If this occurs, the **dose should be reduced to once daily** . Several weeks' treatment may be needed to see the full effects

### D-Antiseptic agents

Skin washes and soaps containing antiseptic agents, such as chlorhexidine, are available. Such products may be useful in acne by degreasing the skin and reducing the skin flora.. There is limited evidence of effectiveness.

## Practical points

### Antibiotics

Acne treatments when used correctly and efficiently, they may reduce the need for oral antibiotics

### Continuous treatment

Acne is slowly responding condition to treatment and a period of **up to 6 months may be required for maximum benefit**. Patients should therefore be encouraged to persevere with treatment.

### Skin hygiene

**Acne is not caused by poor hygiene or failure to wash the skin sufficiently**. Regular washing of the skin with soap and warm water or with an antibacterial soap or skin wash can be helpful as it degreases the skin and reduces the number of bacteria present.

**OTC Topical hydrocortisone and acne** The use of *topical hydrocortisone* is contraindicated in acne because steroids can potentiate the effects of androgenic hormones on the sebaceous glands, hence making acne worse.

### Make-up

Heavy, greasy make-up can only exacerbate acne. Water-based make-up is preferred over oily foundations, and they should be removed thoroughly at the end of the day.

# SCABIES

Scabies is an intensely itchy skin infestation caused by the human parasite Sarcoptes scabiei and is more common during the winter months. The itch can be severe, particularly at night.

## SIGNIFICANCE OF QUESTIONS AND ANSWERS

### Age

Scabies infestation can occur at any age from infancy onwards; it is most common between ages 10 and 19 and more often found in women than men. Refer infants and young children to the doctor if scabies is suspected.

### Symptoms:

**1- Severe pruritus, especially at night,** is the hallmark symptom of scabies (can lead to loss of sleep) .

**2-location of rash**: scabies classically affect the **finger's webs, the** sides of the fingers and wrists . In adults, scabies rarely affects scalp and face, **but infants aged 2 years or under and in the elderly**, **involvement of the head is more common**.

Besides the classic location of the lesions , **external genitalia** of both sexes and women's breasts can be affected .

**3-Burrow** can sometimes be seen as **small thread-like grey lines** (blue-grey ). The lines are raised, wavy about 0.5-1 cm long.

### History:

The itch of scabies can take several (6-8 weeks) to develop in someone who has not been infested previously. The scabies mite is transmitted by close personal contact, so the patient **can be asked whether anyone else they know is affected by the same symptoms** (e.g. other family member).

#### Signs of infection:

Scratching can lead to skin **secondary bacterial** infection such as impetigo can occurs. The presence of a **yellow discharge or yellow crusts** قشور would be indications for referral to the doctor for treatment.

**Medication:** It is important for the pharmacist to establish whether any treatment has been tried already. The patient should be asked **about how any treatment has been used**, since incorrect use can result in treatment failure.

2-**The itch of scabies may continue for several days or even weeks after successful treatment,** so the fact that itching has not subsided does not necessarily mean that treatment has been unsuccessful.

| When to refer |
| --- |
| Babies and young children |
| Crusted scabies |
| Scabies outbreak in institutions (schools, nursing homes) |
| Acquired through sexual contact |
| Infected skin |
| Treatment failure |
| Unclear diagnosis |

## Management

Permethrin cream is used first line and malathion can be used where permethrin is not suitable. The treatments are applied to the entire body, including the neck, face, scalp and ears in adults. Permethrin is usually applied in the evening and left on overnight (malathion is left on for 24 h). Two treatments are recommended, 7 days apart. Treat all members of the household.

### A-Permethrin cream (5% cream):

1-Permethrin appears to be the most effective scabicide and is the drug of choice.

2-Apply 5% preparation over whole body including face, neck, scalp and ears then wash off after 8–12 hours.

3- If the hands are washed with soap and water within 8 h of application, cream should be reapplied to the hands.

### B-Malathion Aqueous solutions (0.5%):

The aqueous lotion should be used in scabies. The lotion can be poured into a bowl صحن and then applied on cool, dry skin using a clean, broad paintbrush,

cotton wool. The lotion should be left on for 24 h, without bathing, after which it is washed off.

### Practical Points

1-Patient should be told **that the itch will continue and may become worse in the first few days after treatment**. Crotamiton cream or lotion can be used to relief the symptoms and oral antihistamines may be considered in severe itching

2-Good practical advice is to apply the treatment **immediately before bedtime** (leaving time for it to dry).

3-The treatment should be applied to cool, dry skin.

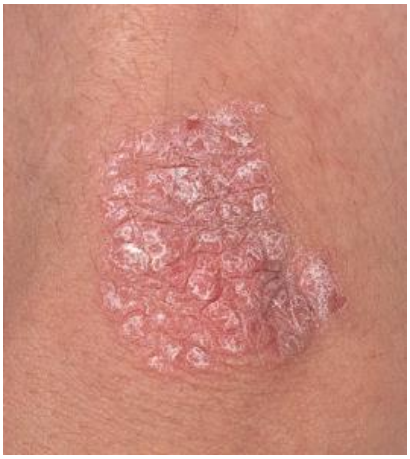
4-**All the family members should be treated**, preferably on the same day because they may be infested but symptomless .

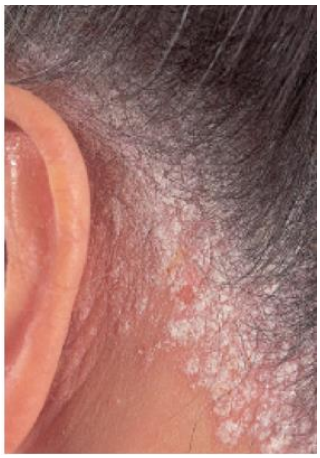
5-The scabies mite can live only for around 1 day after leaving its host and transmission is almost always caused by close personal contact. It is possible that reinfestation could occur from bedclothes or clothing and this can be prevented by washing them at a minimum temperature of 50°C after treatment.

## PSORIASIS

Psoriasis is a chronic inflammatory disease with predominantly skin manifestations. It is characterised by scaly skin lesions, which can be in the form of patches, papules or plaques. Arthritis is also sometimes seen with the disease.

The doctor is the most appropriate first line of help, and pharmacists should always refer cases of suspected but undiagnosed psoriasis.





## SIGNIFICANCE OF QUESTIONS AND ANSWERS

### Appearance

There are raised, large, red, scaly plaques over the surfaces of the elbow and knee. Silvery scales usually cover the plaques. Sometimes there is a patch present over the lower back area. The scalp is often involved. Psoriasis can affect the soles of the feet and the palms of the hand

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### Psychological factors

In some people, the plaques are very long-standing and show little change, and in some, they come and go. With others, the skin changes worsen and spread to other parts of the body, sometimes in response to a stressful event.

**There can be a mistaken belief that the rash is contagious.**

### Diagnosis

It is characterised by scaly skin lesions, which can be in the form of patches, papules or plaques. In addition psoriasis typically involves the scalp, also the

fingernails show signs of pitting (presence of deep holes in the nail), which can be a useful diagnostic sign.

## Arthritis

For some people who have psoriasis, there is an associated painful arthritis, which most commonly affects the hands, feet, knees, neck, spine and elbows.

## Medication

It is worthwhile enquiring about medication. Drugs such as lithium, beta blockers, non-steroidal anti-inflammatory drugs and antimalarials can exacerbate psoriasis.

## MANAGEMENT

### Topical treatments

Emollients are very important in psoriasis; they soften the skin, reduce cracking and dryness, prevent itching and help to remove scales. There is also some evidence that they can suppress psoriasis and in many people with psoriasis should be used long term.

### Calcipotriol, calcitriol or tacalcitol

Topical vitamin D preparations – calcipotriol, calcitriol or tacalcitol – are available as ointments, gels, scalp solutions and lotions on prescription. These products are easy to use and have become the mainstay of treatment in mild to-moderate plaque psoriasis, as they can effectively clear the lesions. The main problem is irritation of the skin with them; and If overused, there is a risk of causing hypercalcaemia

### Topical corticosteroids

Topical corticosteroids alone should generally be restricted to use on the scalp or for small patches of localized psoriasis. They are available on prescription and should not be supplied OTC for this purpose. When used alone they can destabilize the disease and this can result in a severe flare-up of psoriasis. Also an exacerbation of psoriasis is common when they are stopped.

### Coal tar preparations

There are many coal tar preparations available and most of these can be provided OTC; these include ointments, shampoos and bath additives. Various preparations are combined with other topical treatments for psoriasis, for example, salicylic acid, which helps to break down keratin.

### Dithranol

Dithranol has been a traditional, effective and safe treatment for psoriasis for many years and is available in creams and ointments (0.1–2.0%) that can be used for one short contact (30 min) period each day and removed. They can be provided OTC if the dithranol content is 1% or less, but its use would normally be supervised by a dermatology specialist.

It is usual to start with the lowest concentration and build up slowly to the strongest that can be tolerated to avoid skin irritation. Users should wash their hands after application. A major drawback is that it causes a yellowy-brown stain on skin, hair and clothing. It should not be applied to the face, flexures or genitalia.

# Eczema/dermatitis:

**Dermatitis** and **eczema** are terms used interchangeably to describe a range of skin conditions characterized by **dryness**, **erythema**, and **itch** of the skin, often with **weeping (fluid filled blisters which is a sign that the dermatitis has become infected with bacteria)** and **crusting**.

However the term **dermatitis** is more correctly used when an **external precipitating factor is present** (contact dermatitis). While the term **eczema** is applied to conditions with an **endogenous** cause in atopic individuals.

**Atopic eczema** is a chronic, relapsing, itchy skin condition often greatly improved with age. **Atopy** is the term used to describe a group of three conditions – eczema, asthma and hay fever – which commonly coexist in an affected individual and which run in families.

**Contact dermatitis may be classified into:**

**1-Irritant contact dermatitis** (ICD): which is **the most common form**. It caused by direct exposure to a substance that has a damaging effect to the skin. It can occur on first exposure to a strong irritant or repeated exposure to milder one

**2-Allergic contact dermatitis** (ACD): Allergic dermatitis is the result of hypersensitivity to a sensitizing agent.

| **Differentiation of Irritant and Allergic Contact Dermatitis** | | |
|---|---|---|
| | **Irritant contact dermatitis ICD** | **Allergic contact dermatitis ACD** |
| **Causative agents** | Water, urine, flour, detergents, hand sanitizers, soap, alkalis, acids, solvents, salts, oxidizers | Metals [chromate (present in cement), nickels (in jewels)], rubber, dyes, certain plants and medications |
| **Mechanism of reaction** | Direct tissue damage | Immunologic reaction |
| **Common location** | Hands, wrist, forearms, diaper area | Anywhere on body that comes in contact with antigen |

## Patient Assessment with Contact Dermatitis

## A-Work related exposure:

To know whether or not contact dermatitis is the problem, pharmacist can ask about:

Site of rash, details of job, onset of rash and agents handheld, and improvement of rash when away from work or on holiday.

## B-Duration:

Rash of more than 2 weeks duration required referral.

## C-Severity:

Severe contact dermatitis (badly cracked /fissured skin, bleeding), or sign of bacterial infection required referral

## D-Medication:

1-Contact dermatitis may be caused or made worse by sensitization to topical medications (antibiotics, anesthetics, antiseptics, steroid…).

2-Failed medication required referral.

| When to refer |
| --- |
| Evidence of infection (weeping, crusting, spreading) |
| Severe condition: badly fissured/cracked skin, bleeding |
| Failed medication |
| No identifiable cause (unless previously diagnosed as eczema) |
| No improvement after 1 week with topical corticosteroids |

## Treatment timescale:

If no improvement has been noted after 1 week, referral to the doctor is advisable

### Management:

1-All form of dermatitis can cause redness, drying of the skin, and irritation / pruritus to varying degrees. Treatment should include three steps: **managing the itch**, **avoiding the irritant** (i.e. non pharmacological advice e.g. : wearing gloves to protect the skin), and **maintaining the skin integrity**.

2-The main agents used are emollients and steroid .**Emollient used on regular basis to keep the condition under control and the flare-up is treated by short course of steroid**.

### A-Emollients:

Emollients are medically inert creams and ointments that can be used to soothe the skin, reduce irritation, prevent the skin from drying, act as a protective layer. It should be used **as often as needed to keep the skin hydrated and moist** (i.e. several daily applications are needed).

Emollients containing active ingredients are not generally recommended because they increase the risk of skin reactions. Active ingredients include urea, which acts as a keratin softener and hydrating agent.

Some patients with eczema believe, incorrectly, that bathing will make their eczema worse. This is not the case; the standard soaps and perfumed bath products are avoided because they have a drying effect on the skin and can make eczema worse.; bathing to remove skin debris and crusts may in fact be beneficial

## B-Topical steroid:

1-Two topical steroids are now OTC for the treatment of irritant and allergic dermatitis, insect bites and mild-to-moderate eczema, which are a mildly potent steroid : **hydrocortisone 1%Cream and ointment**, and moderately potent steroid : **clobetasone 0.05% cream only but not ointment**.

2-Both have proven efficacy in treating dermatitis and should be considered **first-lin**e treatment for **acute dermatitis**.

3-The choice between hydrocortisone and clobetasone is based on the **severity** of the dermatitis and **where the dermatitis is**, with hydrocortisone being best for areas that have thin skin (e.g., flexures), and clobetasone possibly better for other areas (e.g., hands and palms) or where hydrocortisone has failed to control symptoms.

4-After using a corticosteroid an emollient can be applied to the same area **30 minutes later**.

5-Cream is often the preferred product for most patients because of patient preference for a less greasy preparation. Ointment formulations, while often greasy, are preferred on areas of thick skin or if a patient’s skin is dry, or scaly.

6-Hydrocortisone cream can be applied as frequently as two to four times per day.

7-Clobetasone should be applied twice a day.

8-**How much to apply?**

Patients should be instructed to use a **fingertip unit**. This is the distance from the tip of the adult index finger to the first crease. One unit is sufficient to cover an area **twice the size of an adult flat hand**.

9-Their use during **pregnancy is OK**.

10-Unlike the more potent steroids , hydrocortisone unlikely to cause side effects.

### C-Antipruritic and local anesthetics:

1-Antipruritic preparations are sometimes useful, although evidence of effectiveness is lacking. Calamine (Dermocal®)or crotamiton (Eurax®)can be used in cream or lotion.

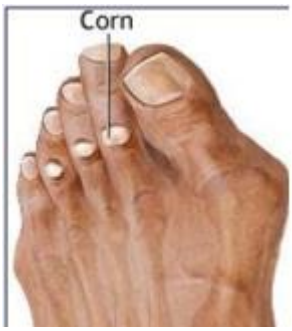
2-Urea may improve skin hydration. It can enhance the moisture-retaining ability of emollients, thereby improving their efficacy. Topical antihistamines and topical anesthetics (e.g., benzocaine) should not be used, as these can cause sensitisation that will aggravate eczema.

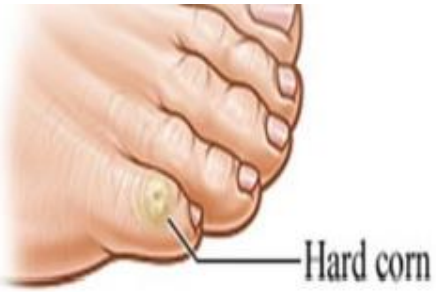
# Corns and callus

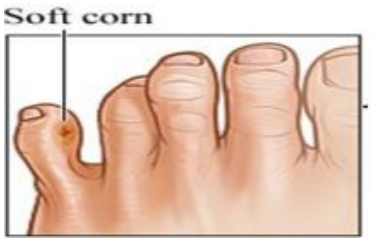
Corn form due to a combination of friction and pressure against one of the bony prominences of the feet. Inappropriate footwear is the frequent cause. (Continued pressure and friction cause hyperkeratosis) . Friction (caused by loosefitting shoes), and walking barefoot contribute to the development of calluses.

### A-Clinical features

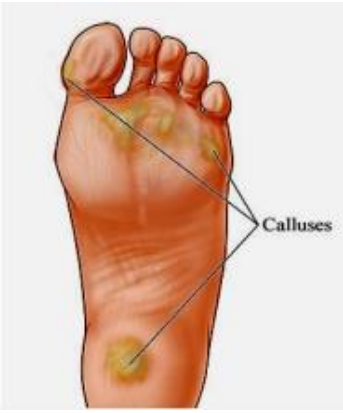
**1-Corns:** Corns have been classified into soft and hard corn. Hard corns are generally located on the top of the toes. Soft corns form between the toes rather on the top of toes and are due to pressure exerted by one toe against another. Soft corns are most common in the fourth web space (they have whitened appearance and remain soft because of the moisture that is present between toes, which cause maceration of the corn).




**2-Calluses:** Calluses are more diffuse areas of thickening on the sole or the side of the foot. Calluses appear as flattened, yellow-white, thickened skin. In women, the balls of the feet are a common site. Other sites that can be affected are the heel الكعب and lower border of the big toe




### B-Pain:

The resulting pain from corns may be severe and sharp (when downward pressure is applied). It is often relieved when footwear is taken off. Patients with calluses frequently complain of a burning sensation resulting from fissuring of the callus.

### C-Previous history:

Patients will often have a previous history of foot problems. The cause is usually due to prolonged wearing of poorly fitting shoes, such as high heels.

**Treatment timescale:** Patient should Seek medical attention if corn or callus is not removed after 14 days of treatment .

### When to refer

-If the lesions bleed or oozing pus.

-If they extensive or painful.

-Patient with anatomical defect in the feet.

-In elderly people and patients with diabetes or peripheral vascular disease.

-Treatment failure

## Treatment

### Nonpharmacologic Therapy

**A-Selection of the properly fitted footwear.**

**B-Epidermabrasion** : Epidermabrasion is a physical process that removes horny skin using a mechanical aid. Several gently abrasive materials are available.

### Pharmacologic Therapy

### Salicylic acid

**1-Salicylic acid in collodion –like vehicle** Paints and liquids contain 11–17% salicylic acid, often in a collodion-based vehicle. Collodions contain a nitrocellulose derivative, dissolved in a volatile solvent. On application, the solvent evaporates, leaving on the skin an adherent, flexible, water-repellent film containing the medicament. Apply product once or twice daily until the corn or callus is removed (but not more than 14 days).

**Note:** do not let adjacent area of normal skin come in contact with drug. If they do, wash off the solution immediately with soap and water.

**2- Salicylic acid plasters:** Corn and callus plasters contain high concentrations (usually 40%). They should be changed every 1–2 days for about a week, after which the callosity should lift away easily.

**3-An ointment** containing 50% salicylic acid is also available; it should be applied nightly for 4 nights.