Eczema, acne and psoriasis are chronic inflammatory skin disorders that follow a relapsing and remitting course. There are many types of eczema but we shall just consider atopic eczema here.

- These skin disorders are not infectious.
- Management is aimed at achieving control and not providing a cure.
- Complications are mainly due to the psychological and social effects.
- Patient education is important in these chronic skin conditions and should concentrate on providing information about the nature of condition, aims of treatment and the available treatment options.

**Learning outcomes:**

- Ability to describe the presentation, demonstrate assessment, formulate a differential diagnosis, instigate investigation and discuss how to provide continuing care of:
- atopic eczema
- acne
- psoriasis
**Atopic eczema**

**Description**
- Eczema (or dermatitis) is characterized by papules and vesicles on an erythematous base
- **Atopic eczema** is the most common type - usually develops by early childhood and resolves during teenage years (but may recur)

**Epidemiology**
- 20% prevalence in <12 years old in the UK

**Causes**
- Not fully understood, but a positive family history of atopy (i.e. eczema, asthma, allergic rhinitis) is often present
- A primary genetic defect in skin barrier function (loss of function variants of the protein filaggrin) appears to underlie atopic eczema
- Exacerbating factors such as infections, allergens (e.g. chemicals, food, dust, pet fur), sweating, heat and severe stress

**Presentation**
- Commonly present as itchy, erythematous dry scaly patches
- More common on the face and extensor aspects of limbs in infants, and the flexor aspects in children and adults
- Acute lesions are erythematous, vesicular and weepy (exudative)
- Chronic scratching/rubbing can lead to excoriations and lichenification
- May show nail pitting and ridging of the nails

**Management**
- General measures - avoid known exacerbating agents, frequent emollients +/- bandages and bath oil/soap substitute
- Topical therapies – topical steroids for flare-ups; topical immunomodulators (e.g. tacrolimus, pimecrolimus) can be used as steroid-sparing agents
- Oral therapies - antihistamines for symptomatic relief, antibiotics (e.g. flucloxacillin) for secondary bacterial infections, and antivirals (e.g. aciclovir) for secondary herpes infection
- Phototherapy and immunosuppressants (e.g. oral prednisolone, azathioprine, ciclosporin) for severe non-responsive cases

**Complications**
- Secondary bacterial infection (crusted weepy lesions)
- Secondary viral infection - molluscum contagiosum (pearly papules with central umbilication), viral warts and eczema herpeticum (see page 34)
Acne vulgaris

Description
● An inflammatory disease of the pilosebaceous follicle

Epidemiology
● Over 80% of teenagers aged 13-18 years

Causes
● Hormonal (androgen)
● Contributing factors include increased sebum production, abnormal follicular keratinization, bacterial colonization (Propionibacterium acnes) and inflammation

Presentation
● Non-inflammatory lesions (mild acne) - open and closed comedones (blackheads and whiteheads)
● Inflammatory lesions (moderate and severe acne) - papules, pustules, nodules, and cysts
● Commonly affects the face, chest and upper back

Management
● General measures - no specific food has been identified to cause acne, treatment needs to be continued for at least 6 weeks to produce effect
● Topical therapies (for mild acne) - benzoyl peroxide and topical antibiotics (antimicrobial properties), and topical retinoids (comedolytic and anti-inflammatory properties)
● Oral therapies (for moderate to severe acne) - oral antibiotics, and anti-androgens (in females)
● Oral retinoids (for severe acne)

Complications
● Post-inflammatory hyperpigmentation, scarring, deformity, psychological and social effects

Comedones
Papules and nodules
Psoriasis

Description
- A chronic inflammatory skin disease due to hyperproliferation of keratinocytes and inflammatory cell infiltration

Types
- Chronic plaque psoriasis is the most common type
- Other types include guttate (raindrop lesions), seborrhoeic (nasolabial and retro-auricular), flexural (body folds), pustular (palmar-plantar), and erythrodermic (total body redness)

Epidemiology
- Affects about 2% of the population in the UK

Causes
- Complex interaction between genetic, immunological and environmental factors
- Precipitating factors include trauma (which may produce a Köebner phenomenon), infection (e.g. tonsillitis), drugs, stress, and alcohol

Presentation
- Well-demarcated erythematous scaly plaques
- Lesions can sometimes be itchy, burning or painful
- Common on the extensor surfaces of the body and over scalp
- Auspitz sign (scratch and gentle removal of scales cause capillary bleeding)
- 50% have associated nail changes (e.g. pitting, onycholysis)
- 5-8% suffer from associated psoriatic arthropathy - symmetrical polyarthritis, asymmetrical oligomonoarthritis, lone distal interphalangeal disease, psoriatic spondylosis, and arthritis mutilans (flexion deformity of distal interphalangeal joints)

Management
- General measures - avoid known precipitating factors, emollients to reduce scales
- Topical therapies (for localised and mild psoriasis) - vitamin D analogues, topical corticosteroids, coal tar preparations, dithranol, topical retinoids, keratolytics and scalp preparations
- Phototherapy (for extensive disease) - phototherapy i.e. UVB and photochemotherapy i.e. psoralen+UVA
- Oral therapies (for extensive and severe psoriasis, or psoriasis with systemic involvement) - methotrexate, retinoids, ciclosporin, mycophenolate mofetil, fumaric acid esters,
and biological agents (e.g. infliximab, etanercept, efalizumab)

**Complications**
- Erythroderma *(see page 33)*, psychological and social effects

![Köebner phenomenon](image1)

![Plaque psoriasis](image2)

![Nail changes and arthropathy](image3)

![Scalp involvement](image4)