Dermatology

History:

- Atopies (patient and family)
- Lifetime sun exposure
- Allergies
- Treatment to date (self or GP)

Examination:

- Distribution over body
- Local patterns
- Individual lesion

Skin types
1: Never Tans, Always Burns
2: Sometimes Tans, Always Burns
3: Always Tans, Sometimes Burns
4: Always Tans, Never Burns
5: Afro-Caribbean

Skin Tumours

Many common, benign tumours such as melanocytic naevi.

- Solar keratosis
    - Dysplastic change
    - 0.1% per year progress to SCC
    - Treat with topical 5-flurouracil or cryotherapy
- Naevus sebaceous
    - Present at birth, fades as child, returns at puberty
    - Stimulated by androgens
    - May progress to BCC or sebaceous carcinoma
- Pre-malignancy
    - Solar keratosis
    - Bowen's disease (in-situ SCC)
    - Naevus sebaceous
    - Dysplastic naevus syndrome
        - Multiple 'odd' moles, FH multiple moles, FH melanoma
- Melanoma
- Naevus spilus (benign)
    - Darker area with lighter speckles
- Cellular blue naevus
    - Dark blue/black
- Dermatofibroma (Benign)
    - Excess fibroblast response to minor injury
- Becker's naevus (Benign)
    - Overgrowth of several skin elements
- Halo naevus
    - Autoimmune loss of melanocytes

- Spitz naevus
    - Red, seen in children
- Seborrhoeic keratosis
- Basal Cell Carcinoma (BCC)
    - Rodent ulcer – shiny, rolled edge
    - Cystic, nodular, morpheic (scar-like), superficial, pigmented
- Squamous Cell Carcinoma (SCC)
    - Less common than BCC
    - Increased risk of metastasis
    - Raised, edge may have shoulder. Keratotic
- Kertoacanthoma
    - (Usually) self healing SCC

Malignant melanoma

- 10% of skin cancers, incidence increasing, 80% of skin cancer deaths
- Case fatality 25%, more life years lost per case than any other cancer
- Median age <50

Suggested by:
- Assymetry
- Border irregularity
- Colour variegation
- Diameter >6mm
- Elevation

Glasgow 7pt. Checklist
Major
- Change size
- Shape
- Colour

Minor
- Diameter
- Inflammation
- Oozing / bleeding
- Mild itch/altered sensation

Types:
- Superficial spreading – irregular outline and pigmentation
- Lentigo – Long radial growth phase. Only type on skin
- Nodular – slightly irregular, vertically invasive from start
- Acral lentiginous – Hutchinson's sign

Breslow level (or Clarke depth on thin skin) most important prognostic factor.
- 5 yr survival
    - >97% if Breslow depth <0.75mm
    - <40% if Breslow depth >3mm
- >4mm or nodal disease - >50% dead in 2 years

Actinic Skin lesions

Benign
- Melanocytic naevi (mole)
    - Junctional, intradermal, compound
- Benign lentigo

Pre-malignant
- Bowens
- Keratoacanthoma

Malignant
- BCC
- SCC
- Malignant melanoma

Treatment:
- Surgery
    - Excision
    - Cautery/electrodissection
    - Curettage
    - Mohs (serial excision with microscopy to tumour margin)
- Cryotherapy
- Radiotherapy
- 5 Fluorouracil (Efudix)

Venous Ulcers

Necrosis of skin from inadequate nutrient or oxygen delivery.

Back pressue causes venous stasis and oedema. Fibrin is deposited around capillaries -> reduced diffusion.

Slow to heal, if at all.

Acne

Chronic inflammation of the pilosebaceous unit. Features increased sebum production, bacterial colonisation, cornification of duct, and inflammation.
83% of girls, 95% of boys have some degree of acne at age 16.

- Comedones ('whitehead'/'blackhead') – Hallmark of acne
- Papules
- Pustules
- Nodules
- Pseudocysts
- Scarring – can be hypertrophic or keloid, most common is ice pick scarring

Graded as mild/moderate/severe, based on physical and psychological factors

Treatment:

- General
  - Avoid picking
  - Gentle washing with mild cleanser
  - Dispel myths!
- Mild
  - Topical therapies
  - Benzoyl peroxide
  - Antibiotic (erythromycin, clindamycin)
    - Combination of the two
  - Anticomedomal
    - Retinoids (adapalene gel, Isotretinoin)
    - Azaleic acid
- Moderate
  - Oral antibiotics (oxytetracycline, erythromycin, doxycycline, lymecycline, minocycline)
    - 6/12 therapy needed
  - Hormonal (Dianette, cyproterone acetate, spironalactone)
- Severe (or resistant, or very distressed)
  - Oral retinoids (Isotretinoin)
    - Reduce sebum and ductal hypercornification
    - Side effects – severely teratogenic, dry mucous membranes, lipid abnormalities, liver enzymes deranged, mood changes/depression

Rosacea

Chronic inflammation of pilosebaceous unit with increased reactivity of capillaries to stimuli. Often history of chronic flushing when younger.

Triggers

- Food (spicy food, alcohol, hot drinks)
- Sunlight
- Emotion
- Drugs.

Symptoms:

- Redness
- Papules
- Pustules
- Telangiectasia
- Rhinophyma (skin thickening)
- Deformity
- Ocular rosacea
- No comedones

Treatment:

- Avoid triggers
- Topical antibiotics – metronidazol gel
- Systemic antibiotics – as for acne
- Oral isotretinoin (low dose)

Intertrigo

Maceration in skin creases, often with candida infection.

Management:

- Weight loss
- Good personal hygeine
- Loose fitting clothes

Psoriasis

Epidermal hyperproliferation with loss of differentiation. Associated vascular proliferation and T cell + neutrophil accumulation in dermis/epidermis. Chronic condition with relapsing and remitting course.

Prevalence 1-3%, M=F. Rare before 10, most common age 15-40. Genetic predisposition, locus unknown.

Transit time from dermis to surface 4 weeks normally, 4 days in psoriasis. Skin is salmon pink with silvery scales. Usually distributed in well demarcated plaques.

Precipitating factors:

- Trauma to skin – Kübner phenomenon
- Infection – strep throat can cause acute guttate psoriasis
- Drugs – e.g. antimalarials, β-blockers
- Emotion/stress
- Alcohol

Types and Differential Diagnosis

- Guttate – shower of small patches, often on trunk
    - Pityriasis rosea
        - Fir tree distribution, may start as ‘herald patch’
- Chronic plaque (commonest form) – scalp, elbow, knee
    - Discoid eczema
    - Tinea
    - Mycosis fungoides
    - Bowen’s disease
- Scalp – no hair loss
    - Seborrhoeic eczema
    - Tinea (hair loss)
    - Discoid Lupus Erythematous (hair loss)

- Hands/feet – not itchy, demarcated
    - Tinea
    - Eczema
- Flexural
    - Seborrhoeic eczema
    - Contact dermatitis

Nail involvement

- Seen in ~3/4 of patients with psoriatic arthritis
- Pitting (in rows)
- Discolouration
- Subungual hyperkeratosis
- Distal onycholysis
- Splinter haemorrhages
- Main differential is fungal infection

Arthritis

- 5-20% of psoriatics
- No correlation with severity of symptoms
- 65% of cases are preceded by skin lesions
- RA like, often affects DIP joint, mono- or oligo-arthritis

Treatment

- No cure, need to discuss risk to children
- Tar
- Steroids
- Dithranol
- Calcipotriol (Dovonex) – vitamin D analogue
- Phytotherapy
    - UVB (310nm)
    - PUVA – Psoralen (group of compounds, sensitise skin) + UVA
- Acitretin/methotrexate/cyclosporine
- Future possibilities
    - Dovobet
    - Anti-TNFα (Infliximab)

Eczema/Dermatitis

Endogenous or exogenous

Types:

- Atopic
- Asteatotic
    - dry - loss of skin oils
- Contact
    - Irritant
    - Allergic
- Photosensitive
    - Can be reaction to amiodarone, antimalarials, thiazides
- Seborrhoeic
    - Reaction to yeast
    - tx imidazole cream
- Venous stasis
- Discoid
- Pityriasis alba
    - Pale patches on skin
- Pompholyx
    - Blisters
- Lichen simplex

Atopic eczema

Treatment:

- Loose clothing
- Avoid excess heat
- Avoid scraching
- Emollients
- Topical steroids
    - Ointment in preference to cream
    - Lowest effective potency
- Tacrolimus
- (systemic antihistamine)
- (treat secondary infection)
- (check food allergies)
- Resistant
    - PUVA
    - Azathioprine (LFT, FBC, U+E)
    - Cyclosporin (renal fn.)

Alopecia

Hair types:

- Velliss - cover most of body
- Terminal - coarse
    - distribution androgen dependant

Cycle:

- anagen (growth) 1000 days
- catagen
- telogen (rest) 100 days

Asynchronous growth of different follicles, so continuous cover

Non-scarring alopecia:

- common - alopecia areata (patchy)
    - exclamation mark hairs are diagnostic
- alopecia totalis (all scalp)
- alopecia universalis (all body)
- 2nd commonest - androgenic alopecia
    - bitemporal recession and crown
    - 'Male pattern'
- Telogen effluvium (e.g. Few weeks after giving birth)
- Syphilis
- SLE
- Nutritional alopecia
- Drug induced alopecia
- Traction alopecia (tight hairstyles)
- Endocrine

Scarring alopecia:

- Fungal scalp infections
- Chronis discoid lupus erythematosus
- Lichen planus

Treatment:

- Diagnose
- Treat any underlying cause
- Wait, watch, reassure
- Interventions rarely succesful

Misc

Lichen planus – purplish, polygonal, pruritic papules
Induration - skin thickening
Eczema and dermatitis are terms for same condition
Campbell de Morgan spot – benign, red, non-blanching lesion