



Diverse Dermatology

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Introduction

Inequality in Dermatology:

From the 18th to the 20th centuries Dermatology as a discipline grew from Europe¹ and because of this, terminology and grading systems were developed to describe, classify and teach dermatological conditions and signs as they appear in fair-skinned, European populations². Although now changed, the Fitzpatrick Skin Phototype (FZP) for example, originally placed all non-white skin in one category³. The General Medical Council states that doctors should be equipped to treat the diversity of patients and services users in the UK population⁴. However, through its historical development Dermatology has been left with inadequate descriptive terminologies for Black, Asian and Minority Ethnic (BAME) skin³, deficiencies in dermatological educational and training resources⁵ and inappropriate grading systems³. Banner A, et al. studied skin disease across multiethnic populations in London and found that 'diagnosis unknown' was more commonly cited in both Asian and African/Afro-Caribbean cohorts (4.8% and 3.3% respectively) in comparison with the White British cohort (0.09%)⁶, exemplifying the difficulties doctors now face when assessing and diagnosing dermatoses in non-white skin³.

Diverse Dermatology:

Diverse Dermatology is a non-specific term that this book uses to describe aspects of skin disorders that relate to those individuals of diverse racial and ethnic background who have richly pigmented skin, it highlights the importance of genetics, biology and cultural practises on skin conditions^{1,3,7}. Defining the scope of diverse Dermatology is difficult and has several limitations. Skin colour is a continuum, therefore at what point does it become pigmented? Should patient's skin be categorised by self-identified ethnic group, by

Fig. 1: Fitzpatrick Skin Types³

FZ1	White skin. Always burns, never tans
FZ2	White skin. Always burns, minimal tan
FZ3	White skin. Minimal burn, moderate tan
FZ4	Light brown skin. Minimal burn, tans well
FZ5	Brown skin. Rarely burns, tans deeply
FZ6	Black skin. Never burns, tans deeply

race, skin colour, FZP or not at all and how should people who identify with more than one group be classified⁷? It is important to remember however that the epidemiology of dermatoses vary between ethnic groups³. Therefore, it is an important aspect to consider - for example inflammatory dermatoses (including psoriasis, eczema and acne) are the leading diagnosis in non-white skin whereas skin cancers predominate in White British⁶. The effects of culture and socioeconomic status must also be considered, with access to adequate nutrition, dermatological care, and cost of treatment contributing to inequity⁷.

This resource aims to focus on patients with FZP 4-6 (see fig. 1) and those from African, Asian, Middle Eastern and/or Hispanic ancestry. It will aim to cover common skin conditions - the nuances of how they present in these skin types and contrast with FZP1-3, however it will focus on the dermatoses that are particularly pertinent to the UK's ethnic minorities^{6,10}.

Diverse Dermatology in the UK population:

Over the past two decades England and Wales have become more ethnically diverse, seeing a decline in the white ethnic group from 94.1% in 1991 to 86% in 2011, with rises in all other ethnic minority groups⁸. Rees PH et al. suggest that by 2061 BAME people will make up 30% of

the UK's population⁹. This resource therefore, is essential to medical student and junior doctors to make sure that they are equipped to treat the diversity of patients and services users in the future UK population.

The skin:

The skin is the largest organ in the human body and is comprised of three layers - Epidermis, Dermis and Subcutis. The skin appendages (structures formed by skin-cell derivatives) are hair, nails, sebaceous glands and sweat glands.

How does pigment effect the skin?¹⁰

Melanin gives skin its colour, it is synthesised by melanocytes in the basal layer of the epidermis. Greater size, production rate of melanocytes and greater storage in melanosomes makes skin pigment darker.

- Structure of skin - darker pigmented skin tends to have a thicker dermis and smaller collagen fibres
- Ageing - melanosomes degrade slower in darker skin
- UV - darker pigment provides greater UV protection.

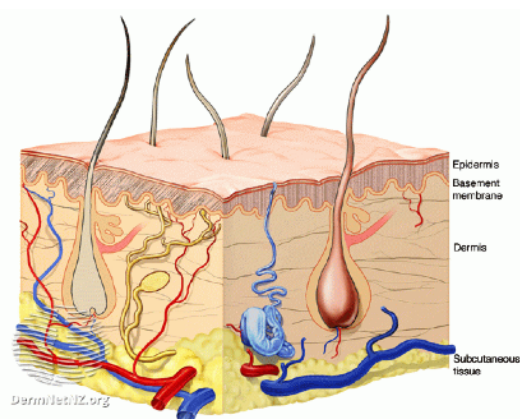


Fig. 2: Skin Structure¹⁰

The difference in the skin's structures and pigmentation can mean that different conditions have a greater prevalence in non-white populations. However, other factors besides these must be considered when assessing how pigment may effect prevalence. Individual family genetics within ethnic minorities may also increased / decrease prevalence of certain diseases. Socio-economic and cultural factors must also be considered and it is important to remember that the darker skin pigments means some diagnoses can be more difficult to make.

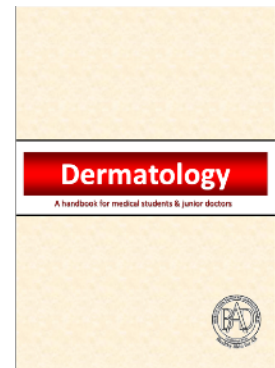
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Pre-Booklet Learning & Quiz

Before using this resource it is important that you understand:

- The basics of Dermatology
- Traditional Dermatological terminology
- Anatomy of the skin
- How rashes featured in this handbook may look in FZP 1-3 (so we can compare and contrast presentations)



Please use the **'BAD Dermatology handbook for medical students and junior doctors'** in order to understand the basics above. Follow the link or QR code below to assess

<https://bit.ly/3qHRqqR>



Please now complete the following quiz on the content covered in the BAD Handbook

https://quizlet.com/_95rauw?x=1qqt&i=2lga76



Inflammatory



Eczema



Fig. 1.1: Eczema on the neck

Fig. 1.2: Eczema close up

Typical case: A 7 year old girl, who presents with an itchy rash on the flexor surfaces of her arms. She had several episodes of Viral Induced Wheeze as a child. She has a family history which includes asthma and hay fever.

A chronic, itchy skin condition that is very common in children but may occur at any age

Epidemiology	- Some studies have shown a greater incidence within BAME communities
Aetiology	- Not fully understood, history of atopy - Defect in skin barrier function - filaggrin protein - Exacerbated by allergens, infections, heat and stress
Presentation	- Classically: Itchy, erythematous, dry, scaly patches. On extensor surfaces and the face in infants and flexor surfaces in adults. - Diverse: Presentation does not fundamentally differ between ethnicities. However, erythema is less visible in pigmented skin
Management	- Avoid triggers - Emollients, soap substitutes - Topical Corticosteroids - for acute flares - Topical calcineurin inhibitors - Severe disease - phototherapy, immunosuppression and dupilumab
Complications	- Eczema Herpeticum - HSV infection



Fig. 1.3: Eczema Herpeticum

Acne



Fig. 1.4: Acne on Face 1



Fig. 1.5 Acne on Face 2

Typical Case: A 13 year old female with with a maculo-papular rash over her cheeks and her shoulders.

An inflammatory condition of the pilosebaceous follicle

Epidemiology	- No more or less common in pigmented skin
Aetiology	- Hormonal - Contributed to by: increased sebum, abnormal follicular keratinisation, bacterial colonisation - Cultural practices may also have an influence (eg: the use of hair oil)
Presentation	- Classically: Papules, pustules, nodules and cysts, with erythema - Diverse: As above, however erythema less visible
Management	- Topical therapy - benzoyl peroxide, antibiotics, retinoids - Used for shorter periods in pigmented skin as drying the skin can worsen post-inflammatory hyperpigmentation - Oral therapy - antibiotics and anti-androgens (females) - Oral retinoids (isotretinoin)
Complications	- Post inflammatory hyperpigmentation may be more significant in BAME skin

Psoriasis



Fig. 1.6: Psoriasis on Legs



Fig.1.7: Psoriasis on Back

Typical Case: A 30 year old man with newly developed plaques on the extensor surfaces of his knee and elbows. He has recently recovered from a viral infection and has noticed changes to his nails

A chronic inflammatory skin disorder due to hyper proliferation of keratinocytes and inflammatory cell infiltration

Epidemiology	- More common in Caucasians but may affect people of any race
Aetiology	- Complex - genetics, immunology and environment - Precipitated by trauma (Köebner phenomenon), infection, stress
Presentation	- Classically: Erythematous scaly plaques. Common on the extensor surfaces and scalp. Associated with nail changes and arthropathy - Diverse: Hyperkeratinisation may take on a 'grey scale' appearance, the plaques may have a dark-purple hue
Management	- Avoid triggers - Topical - Vit D, corticosteroids, retinoids, keratolytics - Phototherapy for extensive disease - Oral therapies in severe psoriasis - methotrexate, retinoids, ciclosporins

Urticaria and Angioedema



Fig. 1.8: Urticaria



Fig. 1.9: Angioedema

Typical Case: A 12 year old girl with wheals over her hands and forearms as well as Angioedema of the lips. She has no significant past medical history apart from a peanut allergy

Characterised by wheals (hives) or Angioedema, urticaria occurs due to local increase in vessel permeability and is mediated by several inflammatory cytokines but most greatly by mast cell release of histamine.

Epidemiology	- No more or less common in pigmented skin
Aetiology	- Idiopathic - Foods - nuts, seeds, shellfish - Drugs - NSAIDs, Morphine, ACEi - Insect bites and infection
Presentation	- Classically: Urticaria - swelling of the superficial dermis causing itchy, raised, erythematous wheals. Angioedema - deeper swelling of dermis and subcutaneous tissues - Diverse: As above, however erythema less visible
Management	- Antihistamines - Corticosteroids for severe acute urticaria / angioedema - Montelukast - Omalizumab
Complications	- Angioedema - airway compromise

Lichen Planus Pigmentosus



Fig. 1.10: Lichen Planus in the Axilla



Fig. 1.11 Lichen Planus on the flank

Typical Case: 50 year old lady with several new macules in her axilla that are brown in colour. She has a family history of T1DM and UC.

Lichen Planus is an autoimmune condition that results in chronic inflammation of skin and mucosal surfaces. Lichen Planus Pigmentosus occurs in those with darker skin resulting in patches of hyperpigmentation which tend not to itch.

Epidemiology	- Lichen Planus Pigmentosus only occurs in darker skinned patients
Aetiology	- T cell mediated autoimmune disorder, where an unknown protein is attacked within keratinocytes
Presentation	- Patches of macular hyperpigmentation that don't itch, mostly on face, neck and upper limbs. - They vary in colour from slate-grey to brownish black - It may also present with the more typical lichen planus papule - Course may be prolonged and could last over several years - There may also be mucosal, hair and nail involvement
Management	- Topical Steroids - Oral steroids - Acitretin - Immunosuppression - Phototherapy - No treatment that can reverse hyperpigmentation

Cutenous Sarcoid



Fig. 1.12: Cutenous Sarcoid

Typical Case: a 27 year old lady with SOB and painful red plaque-like skin lesions across her nose, cheeks and ears. She is a non-smoker and a non-drinker with no significant PMH.

Sarcoidosis is a multi-system granulomatous disease. There are scattered collections of mixed inflammatory cells present in different parts of the body. It usually starts in the lungs, however in 20-35% of patients the skin will be affected - this is cutaneous sarcoid.

Epidemiology	- Although rare, sarcoid is more prevalent in black skin
Aetiology	- Cause is unknown - Thought to be a disorder of the immune system
Presentation	- Lesions may be non-specific or specific - Specific lesions show granulomas on histology: - Lupus pernio (large bluish-red and dusky purple infiltrated nodules and plaque-like lesions on nose, cheeks, ears, fingers and toes) - Skin plaques - Maculopapular eruptions
Management	- For most patients there is no treatment - Steroids or immune-modifying agents may help

Pseudofolliculitis Barbae



Fig. 1.13: Pseudofolliculitis Barbae

Typical Case: A 28 year old African-American male who has noticed papules in the area where his beard hair grows.

A foreign-body reaction to ingrown facial hairs as a result of hair removal.

Epidemiology	- Estimated prevalence of 45-85% of African-Americans. - More common in males - affecting neck and beard - Women may also be affected on areas where hair removal has occurred
Aetiology	- Due to hair removal - shaving, plucking, waxing - Curly hair - curl means sharp pointed end re-enters the skin
Presentation	- Classically: A erythematous, pruritic, maculo-papular eruption in the area that has been shaved, typically on the neck or under the jawline. - Diverse: As above, however erythema less visible
Management	- Cease or reduce frequency of hair removal - Shave with grain - Moisturisers, cleansers - Disposable / sterile blades - Topical steroids, topical retinoids
Complications	- Follicles are susceptible to infection - folliculitis barbae - Hyperpigmentation - Keloid Scarring

Infection



Pityriasis Versicolor



Fig. 2.1: Pityriasis Versicolor in axilla



Fig. 2.2: Pityriasis Versicolor on arm

Typical Case: 21 year old student, with no significant PMH presents with a several month history of asymptomatic lesions on his chest. He has had similar lesions to this during the summer months before. He plays lots of sports.

A rash caused by a fungal infection which proliferates in the stratum corneum. It causes flaky discoloured patches which appear on the chest and back

Epidemiology	- Most common in young adults - More common in hot, humid climates
Aetiology	- Caused by growth of the fungus <i>Malassezia</i>. - This fungus produces azelaic acid which inhibits melanogenesis and prevents the skin lesion from tanning
Presentation	- Classically: Brownish red or pale scaly macules of varying size. Lesions may be darker or lighter than surrounding skin depending on the level of tan in the unaffected skin. - Diverse: Lesions will tend to be lighter than the surrounding skin
Management	- Topical anti fungal agent

Pityriasis Rosea



Fig. 2.3: Pityriasis Rosea

Typical Case: A 4 year old boy who presented to the GP with one solitary red, scaly patch on his chest, a few days later he noticed several more of these patches all over his body. His background includes a recent episode of coryza.

A rash which lasts 6-12 weeks and is may be precipitated by a viral infection of the upper respiratory tract. It is characterised by a 'herald patch' followed by smaller oval red patches.

Epidemiology	- Affects teenagers and young adults most commonly
Aetiology	- Typically triggered by viruses - Influenza - Reactivation of herpesviruses 6 & 7
Presentation	- Classically: Herald patch - single oval pink/red scaled plaque 2-5 cm in diameter. 1-20 days later, similar, smaller, patches appear on the chest and back (and also thighs, upper arms and neck) in 'Christmas tree' distribution. - Diverse: As above, however lesions may look hypo or hyper chromic
Management	- Does not require specific treatment

Tinea Capitis



Fig. 2.4: Tinea Capitis 1



Fig. 2.5: Tinea Capitis 2

Typical Case: A 6 year old female, who had noticed recent patches of hair loss on her scalp accompanied by some scale. She has no PMH and doesn't have any pets at home

Tinea or ringworm, is a fungal infection of varying cause. In tinea capitis this infection is localised to the head (scalp) and it primarily presents with hair loss

Epidemiology	- Higher incidence in those with darker skin tones - though this is thought to be due to cultural practices. - More common in young children
Aetiology	- Caused by Dermatophytic fungi which invades keratinised tissue such as hair and nails. - Anthrophilic (infect humans) - <i>Trichophyton tonsurans</i>, <i>Trichophyton schoenleinii</i> - Zoophilic (infect animals, but cause more inflammation in humans) - <i>Microsporum canis</i>, <i>Trichophyton mentagrophytes</i>, <i>Trichophyton verrucosum</i>
Presentation	- One or more well-defined patches of hair loss and scale. - Zoophilic infections are inflamed, swollen and pustular.
Management	- Oral antifungal - Ketoconazole shampoo
Complications	- Psychological distress associated with alopecia - Scarring alopecia can follow inflammatory tinea capitis

Viral Warts



Fig. 2.6: Viral Warts

Typical Case: A 6 year old boy with small hyperkeratotic papule over the dorsal aspect of the hand. He recently started at school and have said he enjoys playing a game where him and all his class mates hold hands.

Benign proliferations of the skin associated with the human papillomavirus.

Epidemiology	- Particularly common in childhood - 15% of school age children
Aetiology	- Human papillomavirus (HPV) - Type 1, 2 and 4 cause common viral warts - Other notable types of HPV exist: 16&18 (Onocovirus) 6&11 (genital)
Presentation	- Classically: Rough and hyperkeratotic papule, present on the dorsal aspect of fingers and toes as well as knees - Diverse: May look darker than their classical appearance
Management	- Topical keratolytic (salicylic acid) - Occlusion with tape - Cryotherapy

Molluscum Contagiosum



Fig. 2.7: Molluscum Contagiosum

Typical Case: 4 year old female presents with 2 months of 'bumps' over the lower back. Starting with one lesion there are now several. She recently starting swimming lessons for toddlers.

Common infection of the skin caused by a pox virus. It is common in childhood and causes localised clusters of papules or Mollusca.

Epidemiology	- Affects mainly infants and younger children
Aetiology	- Spread through contact with infected persons or objects (including sexual transmission)
Presentation	- Classically: Clusters of papules 1-6mm in size. The lesions are umbilicate (central pit) and are white or pink in colour. Occur in moist locations. - Diverse: Lesions may look darker in colour
Management	- Mean time to resolution is 13 months - Physical - Cryotherapy, curettage, laser ablation - Medical - Antiseptics, podophyllotoxin cream, wart treatments
Complications	- Secondary bacterial infection - impetigo - Conjunctivitis - Secondary eczema - Scarring

Scabies

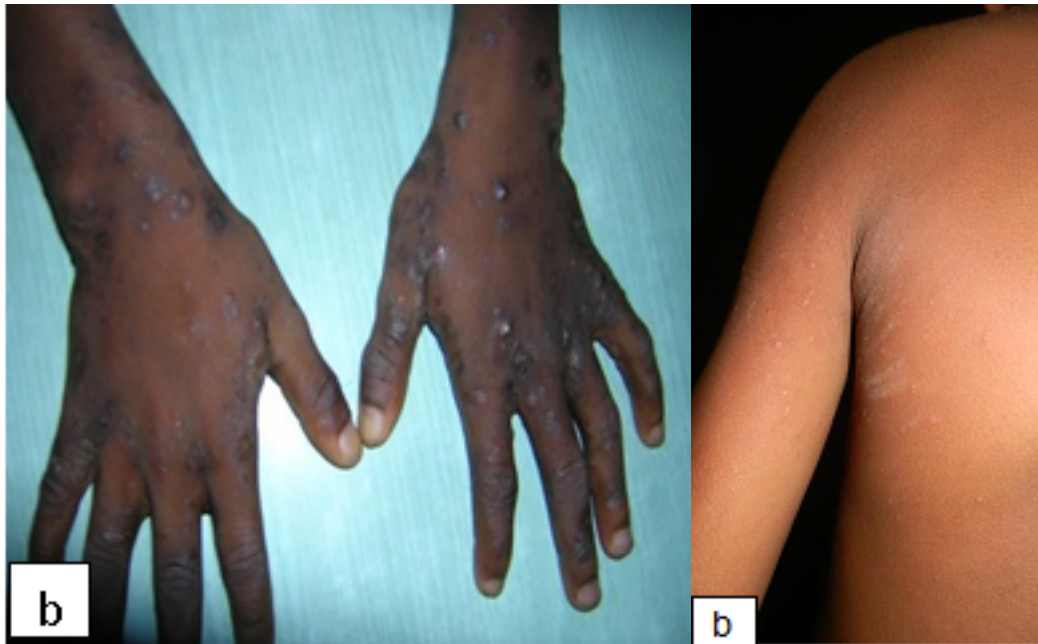


Fig. 2.8: Scabies on the hands

Fig. 2.9: Scabies in the axilla

Typical Case: 74 year old nursing home resident with extremely itchy rash over his hands and arms. Topical steroid cream has not made any difference and other residents at the care home have had similar complaints

*Common and contagious condition caused by allergy to an infestation of the mite *Sarcoptes scabiei hominis*. This leads to widespread intense itching.*

Epidemiology	- Affects mainly children, young adults and older persons
Aetiology	- Allergy to saliva, eggs & excrement of the mite <i>Sarcoptes scabiei hominis</i> - Average adult may be infested with 10-12 adult mites - Norwegian or crusted scabies - when >1000 adult mites infest old or immunocompromised patients - Transmitted through skin-to-skin contact
Presentation	- Classically: intense itching and the lesions secondary to that is the most common finding (papules, erythema and excoriations). There may also be burrows and finger web crusting. - Diverse: As above but erythema is less visible
Management	- Tracing and treatment for all close contacts (household & sexual partners) - 8-14 hours of 5% permethrin cream to whole body. Repeat after 7 days - Steroid and emollient for itching - Hot wash all clothes, bed linen and towels
Complications	- Secondary bacterial infection

Acute Meningococcaemia



Fig. 2.10: Meningococcal Purpura

Typical Case: 18 year old student who had recently started at university. He presented with confusion, reduced GCS, headache and a non-blanching rash on his legs. He mentions that he never went for a vaccine he was offered at the start of university

*Meningococemia is a medical emergency in which the blood becomes infected with the bacteria *Neisseria meningitidis*. It can present with or without meningococcal meningitis (*Neisseria meningitidis* infection of the meninges).*

Epidemiology	- Common in young children and immunosuppressed patients
Aetiology	- Airborne spread through contact with infected persons or objects
Presentation	- Classically: Petechiae and purpura (red or purple non-blanching rash) or maculopapular rash. May be accompanied by signs of meningism, systemic infection, haemodynamic instability, neurology and shock - Diverse: The red and purple colour of the purpura may be less obvious
Management	- Community: Suspected meningococcal = Benzylpenicillin (10+ 1200mg, 1-9 600mg, under 1 300mg) - Once in Hospital: Ceftriaxone 2g IV BD.
Complications	- Haemorrhage and DIC - Arthritis and MSK problems - Neurological problems - Amputation

Impetigo



Fig. 2.11: Impetigo

Typical Case: An 16 year old sixth form student who recently started shaving more often. He has no PMH and his brother recently had a similar episode.

A bacterial infection of the epidermis. Impetigo can be bullous or crusted depending on the type of bacteria which has lead to the infection.

Epidemiology	- Affects mainly children and immunosuppressed individuals
Aetiology	- Crusted - <i>Streptococcus pyogenes</i> +/- <i>Staphylococcus aureus</i> - Bullous - Staphylococcal exfoliative toxins
Presentation	- Classically: Area of golden, honey-coloured crusted erosions. Primarily effects the face and hands. - Diverse: As above but lesions may appear darker
Management	- Usually clears in 2 to 4 weeks - Cleansing with antiseptic - Topical antibiotics - fusidic acid / mupirocin - If widespread / recurrent - oral antibiotics (Flucloxacillin / Erythromycin)
Complications	- Invasion to cellulitis / lymphangitis, plus other areas of the body - Staphylococcal scalded skin syndrome - Toxic shock syndrome - Post-streptococcal glomerulonephritis - Rheumatic fever

Neoplasm



Dermatosis Papulosa Nigra



Fig. 3.1: Dermatosis Papulosa Nigra

Typical Case: A 64 year old lady with minimally change small lesions across her face. She mentions several episode of severe sun burn as a child and has only recent begun to wear suncream regularly. She is otherwise fit and well but does have hypertension.

Benign skin condition which causes multiple small papules to form on the face and neck

Epidemiology	- Greatest prevalence in patients with black skin, but also effects patients with other degrees of skin pigmentation
Aetiology	- Considered a variant of Seborrheoic keratosis, which are benign lesions which originate from the outer layer of the skin
Presentation	- Multiple 1-5cm papules of darker pigment which are symmetrically distributed across the face, neck, chest and back
Management	- No treatment required

Non-Melanoma Skin Cancer



Fig. 3.2: Basal Cell Carcinoma

Typical Case: A 77 year old lady with a small ulcerated lesion on her right forehead. She has a PMH including actinic keratosis, blistering sunburn as a child and also use of sunbeds during the 80s. She is a drinker and a smoker, but has no family history of skin cancers.

Non-melanoma or keratinocyte skin cancer is a type of cancer which arises from the keratinocytes. It has two main forms: basal cell carcinoma (BCC) and squamous cell carcinoma (SCC).

Epidemiology	- Squamous cell carcinoma is the most common skin cancer in patients with black skin and those of Indian origin.
Aetiology	- Can arise DeNovo or form pre-existing lesions due to sun damage
Presentation	- Classically: BCC - Slow growing, small, papule or nodule, with telangiectasia and a rolled pearly edge. (This is the classic nodular BCC but be aware there are also other subtypes) SCC - keratosis, ill-defined nodule which may ulcerate - Diverse: Basal cell is often more pigmented. Clinical elevation of those with richly pigmented skin is difficult and as such may present in a more advanced form
Management	- Surgical excision - Radiotherapy - Chemotherapy - topical (5-fluorouracil) and systemic
Complications	- Local tissue invasion and destruction - Metastasis

Acral Melanoma



Fig 3.3: Acral Melanoma

Typical Case: A 67 year old lady with an asymmetric ill-defined brownish-black patch on the lateral aspect ion of the right ankle. She has no similar lesions

Acral Melanoma is melanoma which involves the palms, soles or nail beds. Melanoma is the most serious and dangerous form of skin cancer, when melanocytes undergo malignant proliferation.

Epidemiology	- Acral melanoma is the most common subtype of melonoma in patients with black skin
Aetiology	- May develop DeNovo or from precursor lesions such as benign melanocytes naevus.
Presentation	- Classically: Moles that are irregular in colour, outline or shape. New or changing pigmented streaks in nails - Diverse: Clinical elevation of melanoma in those with richly pigmented skin is difficult and as such may present in a more advanced form
Management	- Surgical excision - margins determined by Breslow thickness - Sential lymph node biopsy for staging - Radiotherapy, Chemotherapy

Pigmentation & Scarring



Post-inflammatory Hyperpigmentation



Fig 4.1: Post-inflammatory hyperpigmentation

Typical Case: An older male with an area of darkened skin on the flexor surface of his elbow. The area had previously been inflamed when he had a bad episode of eczema.

Pigmentation to the skin that follows injury or inflammation. It is also called acquired melanosis.

Epidemiology	- More common in pigmented skin
Aetiology	- Inflammation - infection, eczema - Injury - trauma, burn - Leads to deposition of melanin within keratinocytes - Medication may darken the pigment
Presentation	- An area of skin that is darkened compared to surrounding skin
Management	- Sunscreen to prevent further darkening - Bleaching / lightening topical treatments - Physical treatments - chemical peels, laser, light

Vitiligo

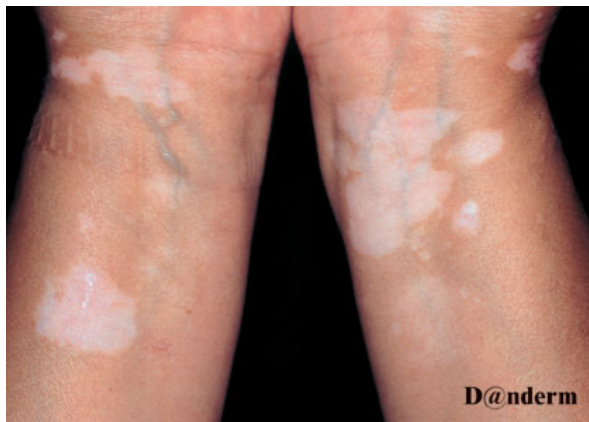


Fig 4.2: Vitiligo on wrists



Fig 4.3: Vitiligo on hands

Typical Case: An 28 year old teacher with patches over her wrists and hands bilaterally. She has not PMH but does have a FH which includes coeliac disease

Skin condition in which melanocytes are lost, resulting in areas of depigmentation

Epidemiology	- Vitiligo affects 0.5-1% of the population and occurs in all races
Aetiology	- Vitiligo is thought to be autoimmune in aetiology, leading to the destruction in Melanocytes and hence loss of melanin.
Presentation	- Classically: Patches of pigment loss that can present on any area of the body. May exhibit Koebnerism. - Diverse: In those with darkly pigmented skin the contrast is greater
Management	- Cosmetic camouflage - Sun protection
Complications	- Psychological effects and reduced quality of life - worth noting especially in BAME patients with greater contrast in skin tones

Melasma

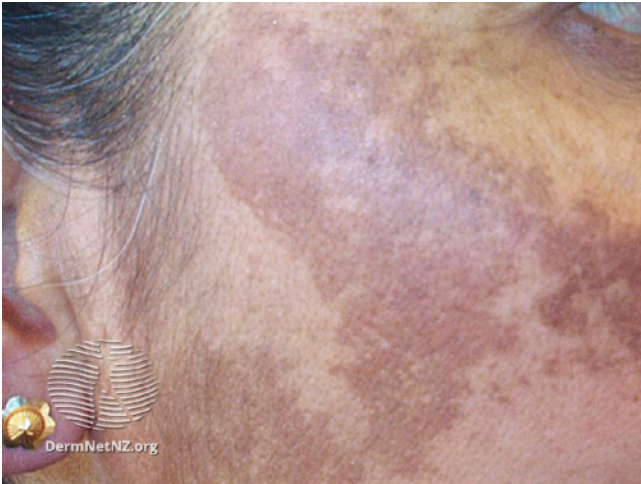


Fig. 4.4: Melasma 1



Fig. 4.5: Melasma 2

Typical Case: A 30 year old lady with darker skin pigmentation. She is not other PMH however she mentions that her mother had a similar complaint when she was a similar age.

Patches of increased pigmentation bilaterally on the face

Epidemiology	- More common in women than in men - Most common in those with darkly pigmented skin
Aetiology	- Complex aetiology - thought to be a combination of photoageing and genetics
Presentation	- Classically: Bilateral, asymptomatic, brown patches and / or macule on the face - Diverse: In those with darkly pigmented skin the contrast is greater
Management	- Cosmetic camouflage - Sun protection - Topical Hydroquinone, tretinoin and topical steroid of moderate potency

Keloid Scarring



Fig 4.6: Keloid Scar

Typical Case: An 45 year old man of African decent, who presented with a firm and smooth linear lump 5cm in length. It is located over the site of scar which was created when he had a laparoscopic appendectomy when he was a teenager

Keloid scarring occurs when there is benign overgrowth of scar tissue.

Epidemiology	- Higher incidence in diverse skin
Aetiology	- Unknown
Presentation	- Classically: Taking months or years to develop keloids are firm, smooth overgrowths of scar tissue which may extend beyond the borders of the original injury. - Diverse: Colour likely to be representative of surrounding skin tone
Management	- Generally persist and maybe resistant to treatment - Some patients may gain benefit from: emollients, gels, dressings, etc. - Intralesional steroid injection
Complications	- Psychological effects and reduced quality of life

Post-Booklet Quiz

Please feel free to complete the quiz below about the content used in this booklet:

https://quizlet.com/_95rdqr?x=1qqt&i=2lga76



Feedback:

Please complete the feedback form!

<https://forms.gle/SW6GsUSUqLSJeijX8>



Feel free to contact me with any questions - jrl221@exeter.ac.uk

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