

The A to Z of Hair, Nails & Skin



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Introduction

This is an extensive revision of the first edition of this book thanks to the many suggestions I have received re inclusions and changes to the book. Most of the pathological terms have been placed in the Common Terms section (CT) which has additional illustrations. This however will not replace *the A to Z of Skin Failure* just as the revised version of *the A to Z of Bones, Joints, Ligaments & the Back*, did not replace *the A to Z of Bone & Joint Failure*, but rather enhanced it.

The three main sections HAIR, NAILS & SKIN of the Main Text (MT) have remained separate in this edition as in the last, but there is more cross referencing, throughout particularly between the CT section and the MT.

Some Cosmetic procedures are included and summarized as they are in many circles regarded as the normal condition of these tissues, particularly the aging skin.

As always please leave or send FEEDBACK, as it really does make a difference.

The A to Zs may be viewed on 2 sites –

www.amandasatoz.com and

<http://www.aspenpharma.com.au/atlas/student.htm>

Acknowledgement

Thank you Aspenpharmacare Australia for your ongoing support and assistance in this valuable project.

Dedication

To all those who have supported me through the tough times.

How to use this book

Think of it and you will find it and if not, **let me know!!**

Try the CT section first particularly for specific terms and then the main text for more general concepts. However not everything can be put into this small volume so you may find it in *the A to Z of Surface Anatomy* or *the A to Z of Endocrinology* or in any of the other **A to Zs**.

Thank you

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Folklore for cutting hair & nails

Cut them on Monday,
you cut them for health
Cut them on Tuesday,
you cut them for wealth
Cut them on Wednesday,
you cut them for news
Cut them on Thursday,
a new pair of shoes
Cut them on Friday,
you cut them for sorrow
Cut them on Saturday,
see your true-love tomorrow

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HAIR

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WOUNDED SKIN

- acute healing process
- white blood cell lines

HOW TO DESCRIBE SKIN LESIONS

Basic principles of dermatological lesions

Abbreviations

A =	actions / movements of a joint	Cif =	chronic inflammation
a =	artery	CIN =	carcinoma in situ
aa =	anastomosis (ses)	CM =	cell membrane
AA =	alopecia areata	CN =	cranial nerve
Ab =	antibody = IL	CNS =	central nervous system
Ab/Ag =	antigen antibody complex	Co =	collagen
Alf =	acute inflammation	collat. =	collateral
AI =	autoimmune	CP =	cervical plexus
adj. =	adjective	CT =	connective tissue
Ag =	antigen	D =	dermis
AKA =	also known as	Dd =	deep dermis / reticular dermis
alt. =	alternative	DD =	differential diagnosis
ANF =	anti nuclear factor	DE =	dermo-epidermal junction
ANS =	autonomic nervous system	diff. =	difference(s)
ant. =	anterior	dist. =	distal
AR =	allergic reaction	DLE =	discoid lupus erythematosus
AS =	Alternative Spelling, generally referring to the diff. b/n UK & USA	DM =	Diabetes Mellitus
assoc. =	associated (with)	Ds =	desmosome
B =	blood	DSTL =	dynamic skin tension lines
B- =	bone marrow derived-	Du =	upper dermis / papillary dermis
bc =	because	Dx =	diagnosis / diagnoses
BCC =	basal cell carcinoma	E =	epidermis
BCR =	B-cell antigen receptor	EA =	epidermal appendages
BM =	basement membrane / bone marrow	EB =	eyebrow
b/n =	between	EAM =	external acoustic meatus
BP =	blood pressure	EC =	extracellular (outside the cell)
br =	branch	e.g. =	example
BS =	blood supply / blood stream	EL =	eyelid
BV =	blood vessel	ER =	extensor retinaculum
Bx =	biopsy	Ex =	examination
C =	cytoplasm	ext. =	extensor (as in muscle to extend across a joint)
CD =	cluster of differentiation		
c.f. =	compared to		

F =	fat / fluid	jt(s) =	joints = articulations
Fab =	antibody binding fragment	k =	keratotic papule
Fc =	fragment – crystal region	l =	lymphatic
FDP =	follicular dermal papilla / hair papilla	L =	lesion / left
FR =	flexor retinaculum	LL =	lower limb
G =	gland	lig =	ligament
Ger =	Germany	longit. =	longitudinal
GF =	growth factors	LP =	lamina propria
gld =	gland	Lt. =	Latin
GIT =	gastro-intestinal tract	m =	muscle
Gk. =	Greek	med. =	medial
grp =	group	mem =	membrane
GS =	ground substance	MM =	mucous membrane
H =	hair	MNC =	mononuclear cells
Hb =	haemoglobin	MO =	microorganisms
HB =	hair bulb	MT =	main text
HF =	hair follicle	Mu =	muscle
Hg =	haemorrhage	MV =	microvilli
Histo =	Histology	N (s) =	nerve(s)
HM =	hair matrix	NA =	nucleic acids
Ho =	hormone	NAD =	normal (size, shape)
HS =	hair shaft	NAD =	no abnormality detected
Hx =	history (of the disease)	NB =	nail bed
IAS =	internal anal sphincter	NF =	nail fold
IC =	intracellular	NK =	natural killer cells
If =	inflammation	NM =	nail matrix
IfR =	inflammatory response / reaction	NMSC =	non-melanotic skin cancer
Ig =	immunoglobulin	No =	nucleolus
IL =	interleukins = immunoglobulins = Ab	NP =	nail plate
Im =	immune	NR =	nerve root origin
In =	infection	NS =	nervous supply / nerve system
IR =	immune response / reaction	NT =	nervous tissue
Ix =	investigation of	Nu =	nucleus
ly =	injury	nv =	neurovascular bundle
		P =	pressure / pus
		PaNS. =	parasympathetic nervous system

ParaNs =	parasympathetic nerves ± fibres	Su =	subcutaneous T / fat
partic =	particular(ly)	subcut. =	subcutaneous (just under the skin)
ph =	phalanges		as a site
pl. =	plural	supf =	superficial
PMNs =	polymorphonuclear cells = polymorphs	SyNS =	sympathetic nervous system
PN =	peripheral nerve	T =	tissue
post. =	posterior	TJC =	tight junctional complex
proc. =	process	Tm =	Tumour
prox. =	proximal	TNF =	tumour necrosis factor
PSU =	pilo-sebacious unit	Tx =	treatment / therapy
PVD =	peripheral vascular disease	UL =	upper limb, arm
Px =	progress / prognosis	v =	vein
R =	right / resistance	V =	vertebra
RBC =	red blood cell / erythrocyte	VB =	vertebral body
RSTL =	relaxed/resting skin tension lines	VC =	vertebral column
RT =	respiratory tract	VDRL =	Venereal Disease Research Laboratory (test for syphilis)
S =	strata/stratum /sacral	wv =	visa versa
Sb =	Stratum basale	w =	with
Sc =	Stratum corneum	WBCs =	white blood cells / leucocytes
SC =	spinal cord	w/n =	within
SCC =	squamous cell carcinoma	w/o =	without
sing. =	singular	wrt =	with respect to
SE =	side effects	ZA =	Zonular adherens
Sg =	Stratum granulosum	ZO =	Zonular occudens
SL =	Stratum lucidum	& =	and
SLE =	systemic lupus erythematosus	∩ =	intersection with
Sm =	Stratum malphigii		
SN =	spinal nerve		
SP =	spinous process / sacral plexus		
SPF =	sun protection factor		
Ss =	Stratum spinosum		
SS =	signs and symptoms		
STL =	skin tension lines		

A to Z of terms & definitions

descriptions of skin conditions & lesions – including physiological &/or pathological changes *

general, anatomical & pathological terms

immunological, inflammatory terms

prefixes / suffixes

The pronunciation guide to words in this section are in bold green lettering

Stressed syllables are in CAPITAL LETTERS

Vowel sounds are pronounced as indicated below

A	May map mark	ay a ah
E	Me met term	ee e ur
I	eye / sight tin	ï i
O	go mother mop more boy lose nook loose	oh uh o or oi oo oe ou
U	blue cute cut	oo ew uh
Y	family myth eye	ee i ï

**note there is often an overlap with these terms in that case if the term is mainly used to denote skin features this colour will take precedence*

ABCDE

system to describe skin changes
and detect neoplasia - melanoma



A Asymmetry



B Borders
(the outer edges are uneven)



C Color
(dark black or have multiple colors)



D Diameter
(greater than 6 mm)



E Evolving
(change in size, shape and color)

Abscess (AB-ses) *Lt ab = away cedere = to go = to go away*

a localized circumscribed collection of pus buried in a cavity of necrotic tissue in the skin at any level (& other organs)

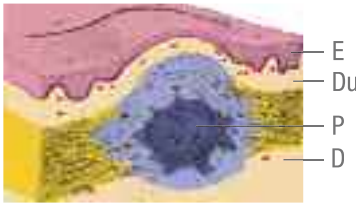
Aetiology In, ± Staph aureus

Histo – localized collection of PMNs

when other inflammatory cells are included = suppuration

abscesses + Hf = furuncle

see also **Boil, Empyema, Furuncle, Phlegmon, Suppuration**



acantho- (AY-kan- thoh) relating to spine or thorn

Acantholysis *Gk thorn prickle loosening of*

breakdown of cell to cell junctions in epithelial cells due to deterioration of ic cement - which may collapse in a blister / cleft



Aetiology - AI

Histo - loosening of the Ds found at the levels of the prickle cells, granular cells ± basal layers

Acanthoma tumour of keratinocytes, as squamous epithelial cells

Acanthosis *Gk thorn, prickles*

thickened skin - diffuse hyperplasia of the SMApighii (ie SGranulosum + SSpinosum)

Aetiology - autoimmune

Histo - increased spinocytes /granulocytes & cornified layer



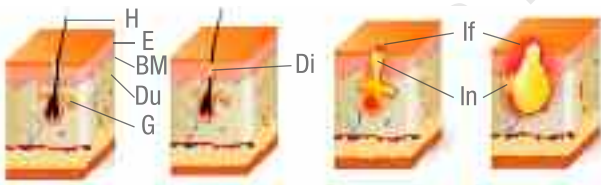
Acanthosis nigricans a diffuse, asymptomatic, symmetric, velvety thickening & darkening of the skin, chiefly in the armpits & other body folds & MMs. The skin appears dirty & thick in the areas of involvement.

DD adenocarcinoma.

Acid mantle the various factors on the skin which cause it to have an acid pH. The major contributor of this is sebum, *see also* **pH scale**.

Acne (AK-nee) *Gk acme = point / chaff* represents a number of conditions resulting from blockage of the pilo-sebaceous unit with debris Di &/or keratin ± If, ± In – Acne is the result of a single process but presents in a number of different ways depending upon the severity & extent of the acne process & blockage(s) and spread of the In. It is found in the facial, cervical & back regions. The commonest type is **acne vulgaris**, appearing before puberty & continuing > 30yo. *see also*

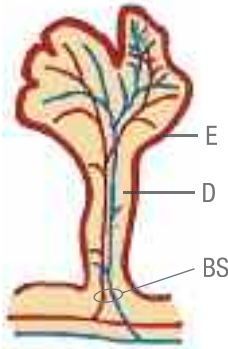
Comedoe, Pustule, Sycosis



Baby Acne is a general term to describe 3 different types of acne in newborns & infants.

- 1 **neonatal milia** - multiple tiny whiteheads on the face of newborns, occurs in half of all newborns – is self limiting
- 2 **neonatal acne** appears after birth – typical pustules looks more like teenage acne, not as severe - typically resolves after a few months.
- 3 **Infantile acne** occurs at 3-4 months looks like regular acne with blackheads, whitehead, pimples and pustules. It may last 2 to 3 years, familial seen in boys only due to maternal androgens .
- 4 **Acne Excoriee** acne with excoriations as features on the sites due to the patient scratching away the comedones & creating “sores”
- 5 **Acne Keloides** nodules developing in Keloid or scar tissue
- 6 **Acne Necrotica** presents in adult men as itchy painful papules and pustules which leave scars and hair loss, possibly due to an In but not related to “**Acne Vulgaris**”

acro- (adj acral) *Gk akron = extreme end, extremity, peak, tip,* denoting something at the extremities ankles / wrists



Acrochodon (AK-roh-kord-on) AKA Fibroepithelial polyp AKA Skin Tag

small, growths of skin that individuals develop around the eyelids, neck, armpits, & the groin. They appear as small little balls of skin attached to the body by a thin stalk. They are benign & familial; predisposing factors are obesity & frictional P on the skin. They increase with age, most people > 40yo will have at least one. *see also Polyp*

Actinic (AK-tin-ik) referring to the light rays over and above the UV and which can cause skin damage **AKA Solar**.

Actinic keratoses *see Keratosis*

Adaptability wrt afferent skin N receptors – when stimulated in a long constant manner, N adapt i.e. they return to their normal firing rate either quickly “phasic” Ns e.g. when putting on clothes they rapidly become “undetected” or slowly “tonic” Ns, e.g. when balancing the position is constantly reported.

Adaptive immunity = Adaptive IR = Aquired IR the response of Ag-specific lymphocytes to Ab, including the development of immunologic memory. Adaptive IRs are distinct from the innate & non-adaptive phases of immunity, which are not mediated by clonal selection of Ag-specific lymphocytes. *See also Immunity*

Additus opening /entrance

adeno-(a-den-OH) gland

Adenoid (ad-EN-oyd) gland

Adenoma benign glandular tumour e.g. sebaceous adenoma in skin - 2-4mm to 1cm yellowish cyst with sebum discharge *see also sebaceous cyst*

Adipocytic metaplasia - changing of the tissue to fat like cells

Adiposis Dolorosa AKA Dercum’s disease painful plaques of bruised hardened fat

Aetiology - idiopathic

Adnexa(e) (AD-nex-uh / AD-nex-ee) appendices or adjunct parts e.g. in the skin, the glands, hair & nails are also derived from the epidermal layer: additional structures pertaining to the main structure; extras

Age Spots *see Keratosis, Lentigo* - this general term indicates a large range of brown marks on the skin which increase in numbers & size with age. They differ from freckles in that they are larger ↑ with age, may be raised on the skin, appear mainly on the hands, feet and face and rarely on other areas even with sun exposure. They are a sign of epidermal breakdown

Albinism complete lack of melanin formation of the skin and eyes - white skin and hair pale iris - poor eyesight and extreme photosensitivity

Albright's syndrome syndrome of polyostotic fibrous dysplasia of bones – and precocious puberty with large café-au-lait lesions up to 10cm *see also Café-au Lait patches*

Allergic reaction (AR) an abnormally high reaction of the Im system to specific substances, e.g. pollens, foods or MOs. Common sites of the AR include the skin & MM (including the GIT & RT).

Allergic Contact Dermatitis *see Dermatitis*

Alopecia (al-OH-peesh- uh). AKA Baldness hair loss

Alopecia areata well defined round patches of hair loss all over the scalp which may become generalized - areas are bordered by **Exclamation point hairs**

Alopecia areata monocularis: a single bald spot on the scalp. AAM

Alopecia areata multilocularis: multiple bald spot on the scalp. AAMx

Alopecia areata totalis: loss of all the hair on the scalp. AAT

Alopecia areata universalis: all body hair, + pubic hair, is lost. AAU

Alopecia areata barbae: loss is only in the beard region, usually patchy. AAB

AAM

AAMx

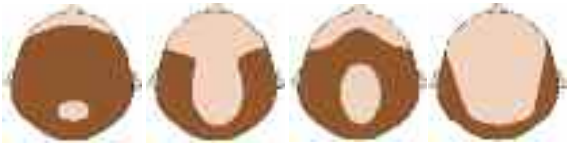
AAT

AAU

AAb



Androgenetic alopecia = male pattern alopecia AM hair miniaturization and loss due to the presence of androgens, beginning at the vertex and forehead there is diffuse hair loss & thinning which variably extends to become complete in these areas – there may be sparing of the temporal & occipital areas.



= **female pattern alopecia AF** similar to male pattern except that there is seldom frontal loss & the loss is more diffuse a thinning rather than balding. *See also Hair loss*



Scarring alopecia defined areas in the scalp causing hair follicle destruction and permanent hair loss associated with **Discoid Lupus, Lichen plano pilaris**.

Tension alopecia AKA traction alopecia AT: hair loss develops along the frontal margins & temporal margins of the scalp due to constant tension on the hair from being tied very tightly – or pulled harshly in styling – Temporal area is particularly susceptible as the hair here is generally thinner. *See also Hair loss*



Alveolus air filled eg. bone - tooth socket *adj - alveolar* (as in air filled bone in the maxilla)

Anagen 1st stage of hair cycle - synthesis of the hair

Anaesthesia loss of sensation

Androgenetic alopecia *see Alopecia*

angio (anj-EE-oh) – to do with BVs

Angioectasias AKA Telangeclasia

Angioedema swelling of tissues due to engorgement & permeability of the BVs & hence the surrounding Ts most affected are MM including the MMs of the GIT & RT part of If

Angioma (anj-EE-oh-mah) - tumour of BVs which are dilated and expanded, it may involve other organs as well as the skin.

On the skin they all blanch when pressed and then "refill" with B with the release of P

Cherry Angioma AKA Senile angioma smooth round dome elevated bright pink, multiple, familial, in numbers with age- bleeds purple

Port Wine birthmark, Sturge-Weber syndrome, presents as a dark red / purple pigmented well demarcated lesion may be quite extensive & involve other tissues

Capillary Angioma AKA Salmon patch presents as a pink mark on the occiput of the head or face & may resolve

Lymphangiomas tumour of the lymphatics

Spider Angiomas present as a network of capillaries on the skin with a central enlarged spot and "legs" coming out -

DD Telangectasia

Angiolymphoid hyperplasia AKA Kimura' disease acquired eruption of small ill-defined violaceous subcut. nodules in the head & neck region

Angiosome a region from the skin to the one supplied by the one source BV

Anhidrosis AS Anhidrosis, AKA Adipohoresis AKA Sweating deficiency total or partial failure of sweat glands - as opposed to **Hyperhidrosis**

Aetiology due to reduced SyNS *see also* **Eccrine glands, Dyshydrosis, Hypohydrosis**

Anlagen *Ger the laying down of* - in embryonic terms the group of cells which cluster together and later form specialized structures

Annular descriptive term to mean concentric circles *see also* **Target lesions**

Anogen active growth phase of the hair

Ansa - a loop like structure

Anthrax In caused by **Bacillus anthracis**, in both animals and man. The spore can exist dormant for decades. It is v contagious.

Skin presentation - a tender red pustule on the skin which becomes a **malignant pustule**, with an hemorrhagic crust, & small vesicopustules surrounding the central lesion, fever, malaise & death can occur w/n a week.

anti- against

Antibodies (Abs) self molecules which are synthesized by the Im cells after being exposed to Ags. *See also Immunoglobulin*

Antigen (Ag) usually a foreign macromolecule that triggers the IR and the production of Abs and other immune active molecules e.g. **tumor necrosis factor (TNF)**. *adj antigenic*

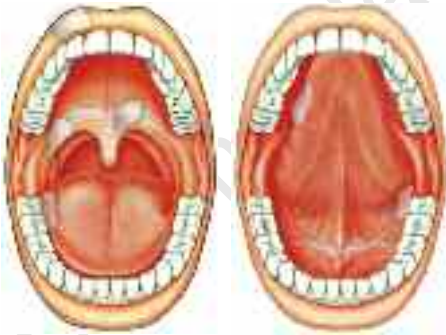
Antigen – presenting cells *see Dendritic cells.*

Anti-inflammatory anything which ↓ inflammation by acting on body responses not the causative agent(s).

Aperture an opening or space b/n bones or w/n a bone.

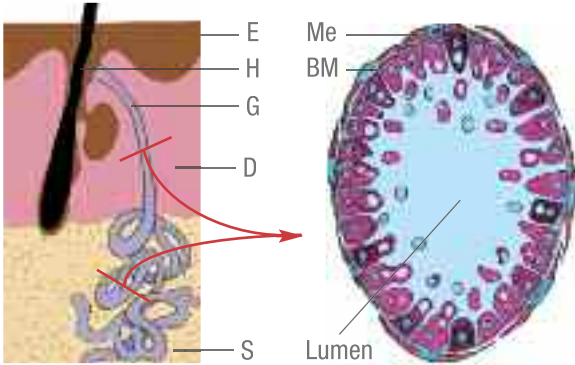
Aphtha pl aphthae adj aphthous / aphthoid Gk ulceration
small ulcer with a grey centre & red halo generally on the MM.

Aphthous (AFF-thus) ulcers Gk aphtha = ulcer AKA Canker sores
recurrent oral ulcers of unknown aetiology, present as white plaques in the mouth & lips common in immunodepressed &/or susceptible patients



Aplasia lack of cell growth *Lt a = w/o plasia = growth*
apo- away from / detached

Apocrine (ap-OH-krin) glands a type of gland where the apical region is sloughed off along (merocrine or decapitation secretion) with its secretions - e.g. apocrine sweat glands are in the axilla & groin regions they are the **Scent sweat glands** (surrounded by myoepithelial cells (Me) to assist in contraction & attached to genital hairs) as opposed to the **Eccrine sweat glands** – see also **Holocrine**



See also **SKIN – epidermis appendages**

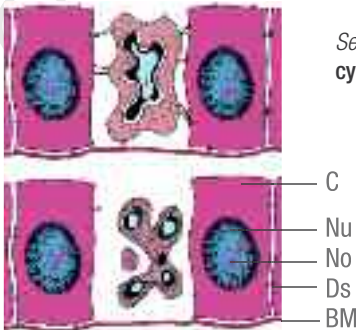
Apocrine hidrocystoma - tumour of apocrine glands often resulting in excess smelly sweat blockage of the Apocrine glands resulting in smelly groins and armpits = Fox-Fordyce disease

Apoptosis *Gk aptos = to drop out*

pockets of dead or dying cells in normal healthy tissue - programmed cell death - found at the levels of the skin and in all organs

Aetiology – anoxia

Histo – individual cell death in healthy cells



See also **MT HAIR - Growth cycle of the Hair follicle**

Appendicular refers to the appendices of the axial i.e. in the skeleton, the arms & legs which hang from the axial skeleton, this also includes the pectoral and pelvic girdles (not the Sacrum)

Arbor *Gk treelike branches – adj. arborizing*, branching

Areata (**ARY-ar-tar**) patches / occurring in patchy distribution

Argyria exposure to silver skin & nails show blue-black diffuse colouration

Astringent a shrinking agent, a solution which shrinks body tissues &/or organs. It may also have drying properties.

Athlete's foot AKA Tinea Pedis a fungal In of the feet, presentation itchy scaly rash on the soles and b/n the toes with cracks and fissures in extreme cases. Closed shoes and sweaty feet are predisposing factors

Atopy (**AY-top-ee**) *Gk atopis = out of place* group of diseases characterized by the tendency to have a severe hypersensitive reaction to common materials as in the RT GIT and skin *adj atopy = allergic* as in *atopic dermatitis* = skin If responding to contact with a substance over-stimulating the IR -

Atrophy (**a-TROH-fee**) *Gk a = lack of, trophe = nourishment* deterioration of T or organ wrt skin loss of thickness or substance of the skin &/or one of its components – thinner, frailer skin -

epidermis = lichen sclerosis

dermis = focal dermal hypoplasia

elastic tissue atrophy = anetoderma

&/or subcutaneous fat = lipoatrophy

This may be a normal process with aging where the skin becomes weaker, and more translucent with loss of collagen fibres & epithelial thickness, subject to tearing and poor healing.

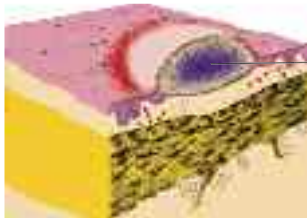
Histo - smaller fewer cells ± extracell material & fibres in one or more of the skin layers



Solar Purpura AKA Actinic purpura AKA senile purpura is a common condition of elderly skin, which has lost a lot of strength & integrity— shearing b/n the layers results in bleeding into the tissue

Pus purulent fluid of AIF composed of PMNs & necrotic material

Pustule = Pimple a skin bleb filled with pus (P) or purulent fluid *see also Acne, Spongiform*



pyo- (Pī-oh) *Gk pus*

Pyoderma (Pī-OH-derm-uh) *adj pyogenic* any purulent skin disease
Impetigo

Pyoderma gangrenosum

Pyogenic Granuloma presents as a well defined raised red or violaceous lump on the skin that may easily bleed, multiple & recurring it is self limiting **DD BCC** *see also Granuloma*

Quick = Hyponychium

Rash a change of the skin which affects its color, appearance &/or texture – multiple lesions close together. It may be localized or generalized & is often associated with an AR, IR &/or IfR - may be blanchable or purpuric

Morbiliform rash - a rash which looks like measles

Raynaud's phenomenon overreactive vasospastic disorder in the extremities fingers / toes – BVs contract in cold and cause hypoxia in these areas – hence wasting & deterioration - in extreme conditions death of the digits etc will result. The skin turns pale cyanotic and later swells and reddens with parasthesia **DD Scleroderma**

Rectus (REK-tus) AKA ortho straight - erect

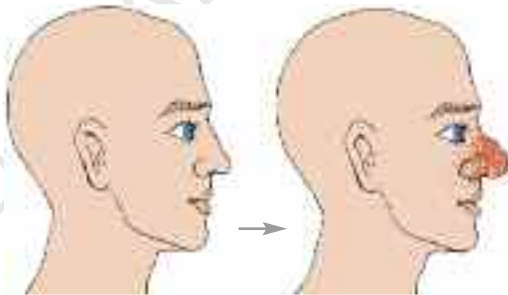
recte- straight

rete ridges deep epidermal ridges which dip into the dermis & increase the surface area – the upward projections from the dermis are the dermal papillae. These are particularly deep in the volar & solar surfaces, *see SKIN - dermis.*

Reticular net-like pattern

Rhinus/rhino- pertaining to the nose

Rhinophyma (RY-no-Fi-muh) presents as a bulbous enlargement of the nose (men) due to hyperplasia of the regional sebaceous glands associated with **Rosacea** – not associated with alcohol



Ridge elevated growth often roughened

Ringworm = Tinea Capitus, Tinea Corporis AKA Kerion

Rodent Ulcer a BCC with a central ulceration, highly invasive often causing a lot of local T destruction *see also BCC*

Rosacea (ROHZ-say-SHEE-uh) presents on the face and cheeks in adults >30yo usually with fair skin – longstanding cases lead to thickened skin (partic on the nose) & telangiectasia *see also Rhinophyma, SLE*

	ACNE	ROSECEA
SYMPTOMS	<ul style="list-style-type: none"> • Pimples • Whiteheads • Blackheads • Inflammation 	<ul style="list-style-type: none"> • Redness in center of face • Nose enlargement • Pimples • Itching
CAUSE	<ul style="list-style-type: none"> • Plugged pores • Infection in pores • Ingrown hairs • Hormone changes • Always involves the HF 	<ul style="list-style-type: none"> • Weather change <ul style="list-style-type: none"> ↑ wind ↑ heat • Emotional stress • Alcohol consumption • Reaction to germs and other content of the pores • Reaction to makeup/skin care products • Always involves the skin BVs
VULNERABLE INDIVIDUALS	<ul style="list-style-type: none"> • Most commony teens • Adult women, on chin and jaws • Adult men, on backs 	<ul style="list-style-type: none"> • Adults over 30 • Women more than men • Fair-skinned people



1

2

3

4

There are 4 main subtypes of rosacea

1. persistent facial flushing
2. “bumps, “pimples”, raised patches on the face
3. enlarged nose (♂ > ♀ rhinophyma)
4. persistent eye redness

Roseola Infantum AKA Sixth disease commonest form of pink/red rash in infants no other SS are present lasts 2-3 days resolves completely **DD Rubella**

Rubella AKA German Measles is a viral disease which incubates for 14-21 days before a light pink rash appears spreading for 24hrs then fading. LNs are swollen and there may be joint pain. This disease is only of significance because of its effect on the unborn foetus. If infected in the 1st trimester the mother may give birth to a severely affected baby.

Rubelliform like Rubella – light pink rash as opposed to **mobilliform rash** which is measles-like – smaller, redder spots

Salmon patch AKA Capillary Angioma *see Angioma*

Sarcoid (SAR-koyd) *Gk sarc -flesh see also Granulomas*

Sarcoidosis a disease in which “sarcoid deposits “ resembling granulomas are placed in various organs in the body including in 25% of cases the skin. In the skin the disease is self limiting, but the disease may resolve spontaneously or continue and prove fatal it is difficult to Dx and treat.

Aetiology idiopathic *see also Granulomatosis*

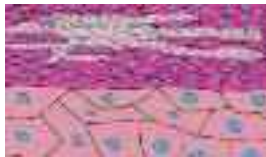
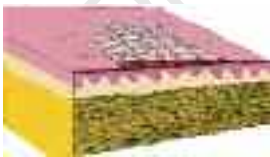
Sarcoma – Gk fleshy lump malignant tumour derived from cells of mesenchymal (CT) origin

Scabies AKA itch mite an highly infectious skin condition caused by *Sarcoptes scabiei*. a tiny mite (around 0.2-0.4mm) which burrows into the skin and causes red bumps & intense itching 4 weeks later. It is spread through: direct skin contact with an infected person & by contaminated bedding, towels & clothes. Presents as fine blueish grey lines in skin folds & or genitals partic in males, but may appear anywhere generally not on the face or scalp.

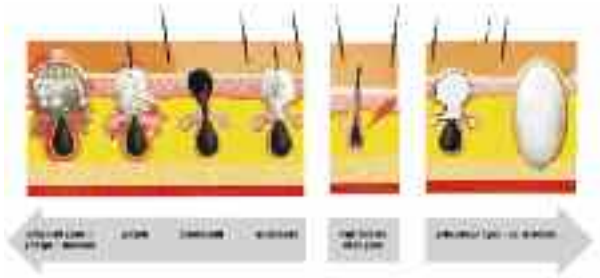
Mites may live for days away from the host so it is difficult to eradicate (animal equivalent is **Mange** but this is due to a different mite species) *see also Burrows*

Scalded skin syndrome *see Bullous Impetigo*

Scale a flake of flat horny cells – loosened from the horny layer (SCorneum) often assoc with parakeratosis **e.g. Parakeratosis, Psoriasis**



Sebaceous cyst blocked skin pores lead to a build up of sebum in the HS. If this becomes infected it leads to acne, if not it forms a sebaceous cyst, which may or may not involve a hair



Scalene uneven

Scar *see also Keloid* the result of healing of an ulcer – full skin defect – where the skin is replaced with fibrous T & the epithelial specializations are lost.

hypertrophic scar this occurs when the CT is raised above the skin line & appears hard - if it extends beyond the area of ly, it is a **Keloid**



Scarlet Fever *B haemolytic Strep* In, presents as sore throat, lymphadenopathy, anorexia, scarlet tongue with enlarged papillae (strawberry tongue) then a bright red rash. It is highly contagious

Schamberg's purpura AKA pigmented purpuric dermatosis *see Purpura*

Sclersosis hard / hardening *adj sclerotic*

Scleroderma AKA Systemic Sclerosis hardening of T & organs in skin hardening of the skin with tightening of the surface itching and dermal and muscle wastage

Scoring systems in dermatology – *see MT SKIN*

Scoring systems in dermatology – There are several systems in dermatology to determine on a quasi-quantitative scale the severity of a disease e.g. eczema and allow for inter and intra-patient comparison.

Scurvy – *Lt Scorbitus = ascorbic acid adj scorbutic*

AKA Barlow's disease when in infants

Presentation red non-blanchable skin spots, easy bruising, poor wound healing, malaise & lethargy, bone pain, bleeding gums & loose teeth

Aetiology deficiency in Vitamin C

Pathogenesis the inability to stabilize collagen which is constantly turned over and needed in skin, MM & all CT maintenance & wound healing

see also Diseases of Micronutrient deficiency – Beriberi, Pellagra

Sebum wax / oily substance *adj sebaceous*

Sebaceous cysts – *see Cyst*

Seborrhoeic AS Seborrheic

Seborrhoeic Dermatitis AKA Dandruff AKA Pityriasis Capitis *see Dermatitis* scaly uninflamed rash on hair bearing areas with loose white flakes

Aetiology In of normal skin yeast – *Malassezia / Pityrosporum ovale* **DD Psoriasis**

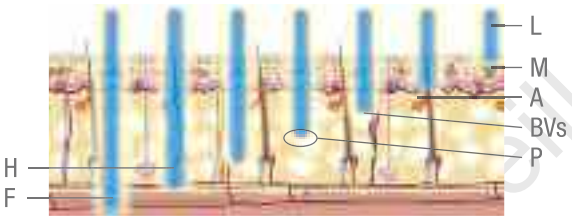
Seborrheic keratosis AKA Age Spots *see Keratosis*

Sebum wax / oily substance secreted by the sebaceous glands *adj sebaceous* pH is generally b/n 4.5 -5.5 and part of the acid mantle of the skin and essential to the health and flexibility of the hair.

Selective Photothermolysis AKA Laser treatment is the process of delivering energy to selectively destroy the desired target, which could be hair, pigment or tattoo dye etc. Factors to be selected for the specific target are: fluence (radiant exposure), pulse duration & wavelength. The laser's energy heats the target above the necrotic temperature but the duration is such that surrounding T is not affected. Generally thick coarse hairs can take longer lower pulse durations which are ineffective on finer hairs.

The depth of the laser penetration (**L**) will determine the target. Some of the uses are shown below.

Shallower pulses will target pigments in the Melanocytes (**M**) to reduce age spots etc., the sebaceous glands for Acne (**A**), deep into the dermis to remove dermal pigments (**P**) as in tattoos, the hair roots to explode the follicles (**H**) for hair removal, deeper for BVs to remove telangiectasia formation, and as deep as the deep fascial layers (**F**) for skin tightening and fat removal



Senile old

Serpiginous snake-like, creeping e.g. to describe a burrowing pattern under the skin by an MO – describes lesions which scar the T below the skin surface while affecting the top layers *see also* **Tinea**

Serratus serrated, saw-toothed

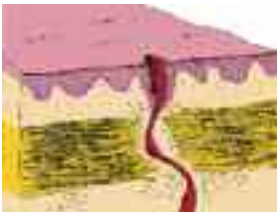
Sesamoid grainlike

Shingles *see* **Herpes Zoster Varicella**

Sigmoid S-shaped, from the letter Sigma which is S in Greek.

Sinus a space usually w/n a bone lined with MM, such as the frontal & maxillary sinuses in the head, (also, a modified BV usually vein with an enlarged lumen for blood storage & containing no or little muscle in its wall). Sinuses may contain air, venous or arterial blood, lymph or serous fluid depending upon location and health of the subject **adj.- sinusoid**.

In the skin it is a canal linking the subcut T or deeper with the outside – and may weep fluid and be difficult to heal



Sjögrens syndrome (SHOH-grins) autoimmune disease present in women > 40 where the cells attack the exocrine glands – and cause: dryness of the eyes, xerophthalmia; mouth, xerostoma & other MMs including; conjunctiva, keratoconjunctivitis sicca, and other areas nose, skin, vagina etc collectively referred to as SICCA symptoms. It is assoc with RA and other AI diseases.

Skin tag = Fibroepithelial polyp = Acrochordon DD Mole *see also Polyp*

Solar referring to the sun – used to indicate a cause of the skin change *see also Actinic*

Solar Elastosis *see Elastosis*

Solar Purpura AKA Actinic Purpura AKA Senile Purpura *see Purpura.*

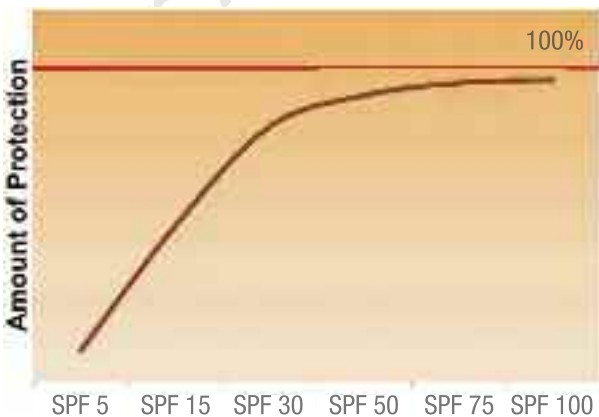
Sore (SAW) *see Ulcer*

Sore mouth *see Orf*

SPF sun protection factor a measure of the effectiveness of sunscreens in preventing exposure to sunlight in particular to the UVB – the Ultraviolet light which causes sunburn.

The factor refers to the increase as a multiple in the time the person can be exposed to the sun (at full strength) as would be experienced w/o any sunscreen. Hence SPF15 indicates the person can be exposed 15X as long to the sun. However this does not take into account the cream wearing off or the sun's strength altering. Note also unless specified the SPF refers only to UVB

see also Sunscreens



Spider Angiomas AKA Spider Telangiectasia AKA Vascular Spiders AKA Spider Naevi *see Angioma* present as a network of capillaries on the skin with a central enlarged spot and “legs” coming out -which blanch on P *see also Telangiectasia*

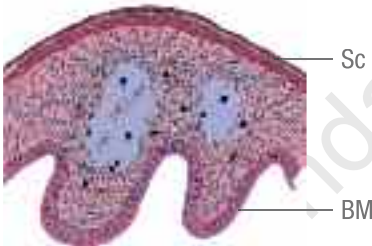
Spine a thorn *adj. - spinous* descriptive of a sharp, slender process/protrusion

Spinocyte AKA Prickle cell – keratinocyte which is in SSpinosum

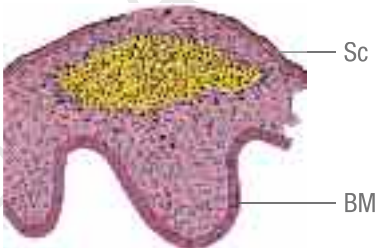
Split ends *see Trichoptilosis*

Spongiosis *adj spongiform* inter-epithelial swelling - inter-epithelial oedema

swelling may be due to serous exudates b/n epithelial cells



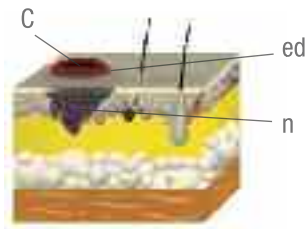
or it may be purulent – i.e. filled with pus – AKA **Munro’s microabscesses** also seen in **Psoriasis & Seborrheic dermatitis**



Sporotrichosis is a fungal skin In of the hand or finger. A growth under the skin may appear at the site of In or it may be an open sore. Nodules may grow advancing up the arm. There can be considerable swelling of the fingers, hand and arms. It is caused by ***Sporotrix schenckii*** a fungus found in the soil. Gardeners, horticulturists, florists, landscapers are at risk for the condition

Squamous flat, square-shaped *see Epithelial cells*

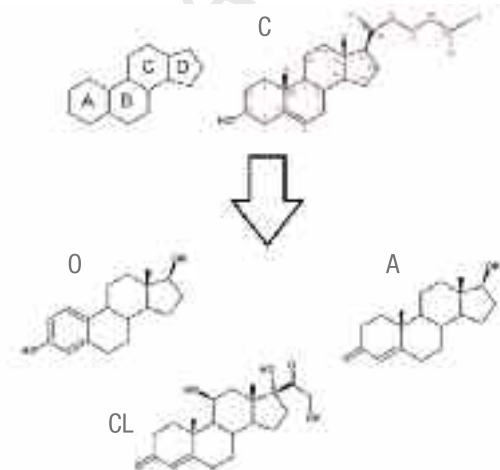
Squamous cell carcinoma (SCC) skin cancer derived from squamous epithelial cells - may occur wherever there is an epithelial layer and take many forms. Distinguishing features the hard irregular edge (**ed**) and the epithelial cells breaking through the BM (**n**) to directly invade tissues - can break off and metastasize, often has a central necrotic area (**C**) May present as a painless red ulcer.



Stasis dermatitis *see* Dermatitis

Steven Johnson syndrome AKA Toxic Epidermal Necrolysis *see* Erythema Multiforme Major

Steroid is a type of organic compound that contains a characteristic arrangement of four cyclo-alkaline rings that are joined to each other. The commonest steroid in the body is cholesterol (C) from which all steroid Hs including cortisol (CL), the oestrogens (O) and the androgens (A) are derived.



Steroid Facies AKA Moon face resulting reversible red rash \pm blisters with **Telangectasia** on cheeks due to application of topical steroids or ingestion of oral steroids, wide fat face & neck, which extends to the trunk, may also have increased facial hair, SLE **DD Rosacea**



Stoma mouth

Strand as in strand of hair – a single hair

Stratified layered

Stratum sheet-like mass of substance / layer / lamina *pl strata*

Stratum adamantium dental enamel

Stratum basale epidermidis (Sb) = Basal stratum / base layer (of the skin) sits on the BM and divides to provide the cells for the other skin layers

Stratum corneum (Sc) outer horny/keratinized layer of the skin (dead cells)

Stratum corneum unguis outer horny layer of the nail = nail plate

Stratum granulosum (Sg) cells with nuclei, & accumulating keratin granules

Stratum germinativum = Sb + Ss

= keratinocytes in the hair follicle which form the HS

Stratum lucidum (SL) = just under the Sc clear dead cells filled with keratin granules

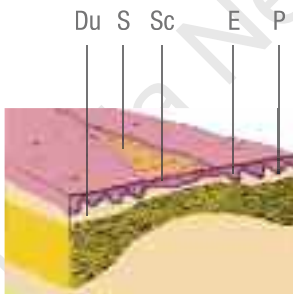
Stratum malphigii (Sm) = Ss + Sg

Stratum spinosum (Ss) spiny layer of epithelial cell in the epidermis
see **MT SKIN - epidermis**

Stria pl striae adj striate (Stry-u; – Stry-EE; Stry-ate) stripe

Striae AKA Stretch marks common acquired condition of the skin, presents as parallel bands of discoloration on the skin, associated with growth spurts or rapid weight gain, as in pregnancy. Initially bright red or deep purple they gradually fade to atrophic white bands which are permanent. When forming they may itch but are often asymptomatic, & they thin & weaken the epidermis (E), reduce the depth and number of dermal papillae (P) & places the collagen closer to the surface (Sc), forming a separation b/n the skin with dermal papillae & the thinner stretched striae (S).

Striae Gravidarum – stretch marks of pregnancy often with a single midline striae Linea Nigra (LN)



Stroma (STROH-muh) *adj stromal* background tissue which may be fibrillar with occasional resident cells present, or matrix & extracellular material, in a tissue, ground substance and the associated cells present which do not represent the main tissue or organ support

Sturge-Weber syndrome a BV malformation present from birth involving the face ocular tissue \pm the brain T – CNV₁ resulting in severe complications – a severe Port-Wine stain *see also Angioma*

Stucco hardening

Stye *see Hordeolum*

sudo- pertaining to sweat

Subcutus *adj subcutaneous* literally under the skin (the cutis) term used to define subcutaneous fat region below the hypodermis, in some cases used interchangeably with hypodermis which is the part of the dermis which lies below the thick collagen bands *see Hypodermis*

Subungal under the nail *see also Hyponychium*

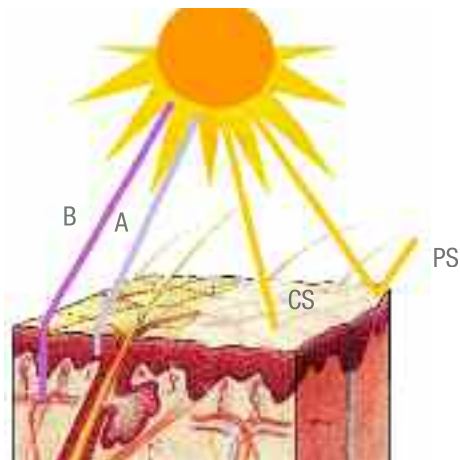
Subunguis AKA Soleplate – modified epithelium under the nail plate or unguis

Sulcus furrow

Sun Spots AKA Actinic Keratoses *see Keratosis*

Sunburn after sun exposure the skin will present with erythema, swelling pain, and later develop blisters crusts & “peeling” soft skin e.g. eyelids etc are v sensitive *see also Sunscreens*

Sunscreens generally refer to creams, lotions and other materials applied to the skin's surface. Some of which act as barriers to the UV - physical sunscreens (PS) - reflecting the light, while others absorb the UV - chemical sunscreens (CS). Not all sunscreens block UVA (A) which has a shallower penetration than UVB (B). *See also* **SPF, Tanning, UV.**



Superior above

Suppuration *adj* **suppurating** *see also* **pus**

Sycosis (SY-koh-sis) Chronic If of hair follicles, especially of the beard, with suppuration.

herpetic sycosis Herpes In of the beard area

lupoid sycosis – scarring form of deep folliculitis

tinea barbae AKA Barber's itch ringworm of the beard

Syn- (SIN) means together ie the close proximity of or fusion of 2 structures.

Syringoma(s) sweat gland tumours 1-3 mm flesh coloured – axilla, eye lid, umbilicus and vulval areas **DD Xanthelasma.**

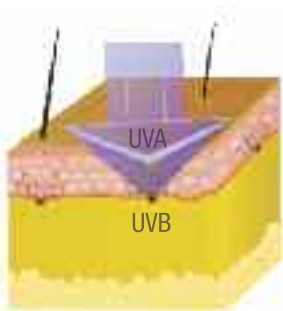
Systemic involving the whole body

Systemic Lupus erythematosis SLE an autoimmune, chronic If, relapsing, remitting disease. SLE can affect any organ system, but mainly involves the skin, joints, kidneys, blood cells, & NS. Ab/Ag complexes are placed on the BM of the skin and kidneys has a characteristic butterfly rash on the face similar to Rosacea.



T cells = T lymphocytes 1 of the 2 major types of lymphocyte. These cells have sub groups but all are derived from the thymus. Reduction in these numbers results in reduced immune protection and excess may cause AI diseases.

Tanning – the increased brown pigmentation in the skin caused by UV stimulation. UVA causes increased release of melanin to the keratinocytes. UVB caused increased synthesis of melanin in the melanocytes. *See also Sunburn*

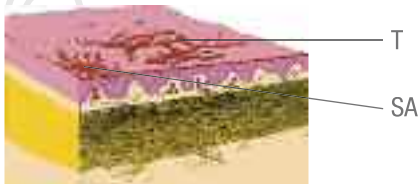


Targetoid target-like, circular with concentric rings

Tattoo foreign dye material in the dermis ingested by resident macrophages remains in the area and marks the skin

- **taxis** locomotor movement of cells

Telangiectasia AKA Angioectasias (T) permanent dilatation of pre-existing capillaries generally smaller than angiomas generally they fill from the periphery. If they fill from the centre – **Spider angiomas (SA) = Spider Telangiectasias** *see also Angioma*



Teledermatology sub-specialty of dermatology where images are sent distances to the specialist for evaluation – this is partic suited for dermatology as skin diseases are partic visible & in most cases do not need intrusive measure for assessment – it is to be noted the large numbers of helpful dermatological sites which can be used by all for ref in Dx of skin conditions

Telogen part of the normal hair growth cycle – long slow growing stage *see* **MT HAIR**

Temporal refers to time and the fact that grey hair (marking the passage of time) often appears first at the site of the temporal bone, from the consideration of wisdom in the temple.

Tendon a tie or cord of collagen fibres connecting muscle with bone (as opposed to articular ligaments which connect bone with bone)

Thrombocyte AKA Platelet – small piece of a megakaryocyte which circulates in the B to plug up any damage in the BVs and stimulate the clotting process

Thrombophlebitis an inflammatory swelling of the vein due to blood clots, may cause skin rupture and is painful partic in the LL.

Tight junctions AKA Tight junctional complex (TJC) formation of membrane-membrane fibrillar connections b/n cells for increased intercellular communication and strength consists of ZO & ZA *see also* **Desmosome**

Tinea (tin-EE-ya) AKA Ringworm a localized fungal infection due to a number of different fungi in susceptible patients with reduced immune system

Tinea corporis is a fungal In of the skin that can occur at any age. It presents as a large, red, ring shaped itchy rash on the skin, with normal skin in the centre as the fungi eats the keratin in the outgrowing skin. Ringworm can occur anywhere on the skin. It is contagious & can be "caught" from many sources, including pets.

Tinea cruris AKA Jock Itch occurs in the groin exacerbated by sweat and so is common in athletes

Tinea Manum AKA hand fungus occurs on the hand, presents as a scaly, rash on the palms of the hands & b/n the fingers.

Tinea Pedis AKA athlete's foot occurs on the feet/ foot of athletes because of the increased sweating with exercise

Tinea Unguium occurs on the nails – big toe especially

Tinea versicolour AKA Sun Spots presents as well defined pale regions on the skin exacerbated after sun exposure. It is common and caused by a superficial yeast on the skin surface. of people with compromised immune systems. The yeast organism is present on all skins but only present in susceptible people – the yeast organism blocks the formation of skin pigment (melanin) and the results may last for weeks or years

TNM staging of skin tumors replaces the older staging of melanomas

T = tumor – tumor thickness in mm +
a = no ulceration / b = ulceration

N = node – number of LNs involved

M = metastasis- number indicating distant spread of the tumor
number looks like T1aNOMO = tumor 1mm thick no ulcer no nodal involvement & no metastases

Toner AKA Skin fresheners AKA Astringents - imprecise term used to indicate a substance which cleans, “refreshes” & “tightens” the pores on the skin. Most of these substances are humectant moisturizers with varying amounts of alcohol content. They are not suitable for dry skin & are generally used in conjunction with other less stimulating moisturizers applied after the toner has dried or been removed, *see also* **Cleansers, Moisturizers**

Totalis – in an overall area as opposed to a localized area

Toxic poisonous

Toxic Epidermal Necrolysis AKA Steven Johnson syndrome *see* **Erythema Multiforme Major**

Transverse to go across

Trichiasis abnormally growing eyelashes – may grow back and scratch the cornea causing irritation – or growing from the medial canthus or naso fold into the eye



tricho- Gk thrix = hair

Trichotillomania a disorder where the sufferer pulls out their hair – including: eyelashes, eyebrows etc

Trichosis / Trichopathy any disease of the hair including abnormal growth *see also* **Hirsutism**

Trichorrhexis AKA Split ends is a defect in the hair shaft characterized by thickening or weak points (nodes) that cause the hair to break off easily or split

Tricophyton fungus that generally causes athlete's foot, & ringworm

Trichoptilosis (TRIK-oh-til-oh-sis) AKA Split ends a longitudinal splitting of the hair fibre.

Trigone triangle

Trunk generally refers to the abdominal region not including the chest *see also* **Corp**

Tubercle a small process or bump, an eminence

Tumor AS Tumour lump, swelling

Tumour Necrosis factor (TNF) family of cytokines first implicated in cancers causing cell death, known to be involved in the IfR

Tylosis symmetric thickened scaly hyper-pigmented plaques on the palms ± the soles strongly associated with oesophageal carcinoma & assoc with Psoriasis

HOW TO DESCRIBE SKIN LESIONS

It is important to know how to describe a skin lesion in a systematic easy to understand manner

- 1 SITE (S)
- 2 SIZE (S) - average or range & variability of each –
- 3 ERYTHEMATOUS or NOT - red or not - hot or not
- 4 DURATION - acute < 2 weeks / chronic > 2weeks

5 SURFACE FEATURES

Normal / Smooth – i.e. the same as the surrounding skin

Crusty – with ulcer

Excoriated – injured

Exudates / erosions

Hairy - ectopically

Horny / keratin thickened

Scaly / increased skin production

Warty / Papillomatous

- 6 FLAT – macules or patches (determined by size) or
RAISED – papules, vesicles, & pustules or plaques,
nodules & bullae

7 NON-BLANCHABLE COLOUR

skin-coloured, or pink, red, mauve, purple, brown, white,
yellow, cream or golden

White blood cells (WBC) = leucocytes

