Hair problems



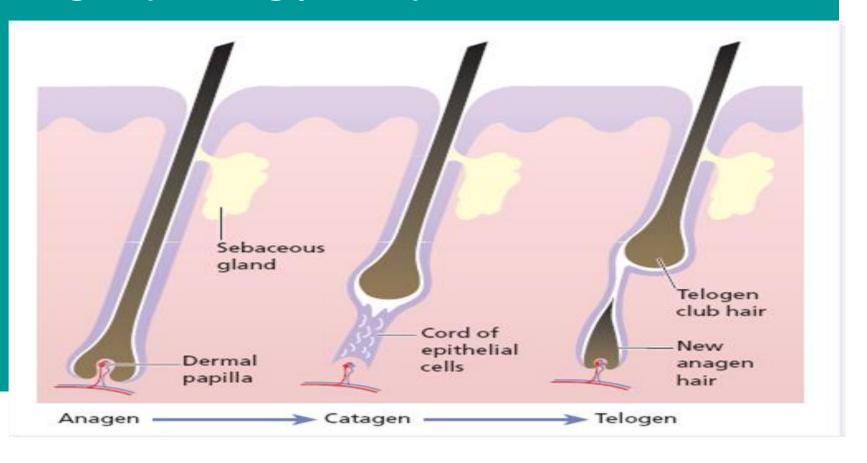
1-hair loss (alopecia)

2-excessive hair growth:

- -hirsuitism
- -hypertrichosis

Hair growth has 3 stages:

- -anagen (growth phase): last 2-6 yr
- -catagen (transitional phase): last 2-6 wk
- -telogen (resting phase): last 2-6 mo



- -this applies to scalp only,
- -other body areas are different.
- e.g eyebrows & eyelashes : anagen 45 days

telogen: 6 mo

alopecia

|- patchy hair loss (localized):

A-scarring PHL: hair follicles are damaged

1-infection -fungal: as in kerion

-bacterial: severe suppurative infection

-viral: as in herpes zoster

2-radiodermatitis

3-physical trauma

4-burn: chemical or thermal

5-neoplasms: BCC, SCC

6-striae distansa: linear area of 2-3 cm in length, in children.

7-SLE

8-lichen planopilaris

9-folliculitis decalvans: chronic idiopathic suppurative folliculitis, ends with scarring.

B-non-scarring alopecia

- 1-neonatal hair loss: physiological ,transient, appear after 3mo.
- 2-alopecia areata
- 3-pyogenic infections :simple bacterial infections
- 4-tinea capitis: but if neglected or severe cases lead to scarring alopecia
- 5-traumatic alopecia

traumatic alopecia:

a-traction alopecia: due to continuous pulling during dressing, more in girls with curly hair to form pony hair, this return to normal if stop pulling but if continuous

lead to permanent hair loss.

b-pressure alopecia: at pressure sites especially legs with firm stockings.

c-frictional alopecia: in patiets with localized pruritic area in the scalp.

- d-trichotillomania: common in peaple with obssessivecompulsive personality or neurosis, seen in children or young adult female.
- -it is localized hair loss with broken hairs of variable length,
- -May affect scalp, eyebrows, eyelashes, beard area & moustash.
- -it may associeted with trichophagia or onychophagia.
- -child usually denied that he pull his hair.
- -Rx:--reassurance
 - --tranquilizer or tricyclic antidepressant
 - --vaseline as lubricant to make hair slip betweens fingers of patient .

alopecia areata

Common, affects all ages but common in children & young Adults, affects 1% of populations.

Aetiology:

1-genetic factors: 25% have +ve family Hx. &10% of Down's.

2-immunological factors: it is auto-immune disease & have

autoantibodies & dysfunctionary T lymphocytes which

surround hair bulb causing cell mediated immunity.

it may associated with other autoimmume disease e.g vitiligo, thyroditis, DM etc...



C/F:

Any part of body can be affected espicially scalp, beard, eyebrows & eyelashes.

The lesion is well defined, usually round patchy, with Normal skin, single or multiple.

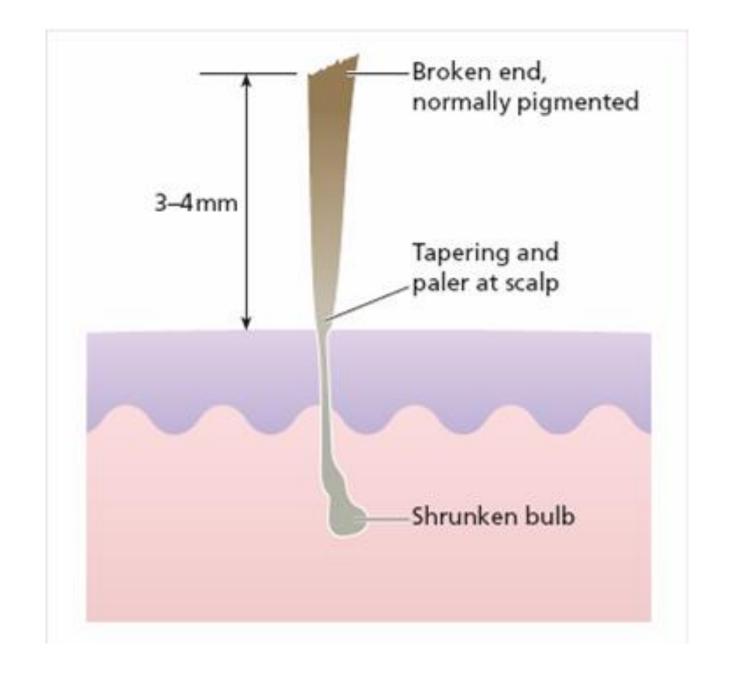
At active border we see exclamation mark hair!

Nails may change: pitting, dystrophy.

Types of lesions: 1-classical (patchy) AA

2-totalis: all scalp hair

3- universalis: all body hair







Prognosis:

- The outcome is unpredictable .50% resolve
- Spontaneously without treatment within 1 yr & only 10% go on to severe chronic disease.
- Subsequent episodes tent to be more extensive & regrowth is slower.
- Bad prognostic signs:
- 1-widespread alopecia
- 2-nail changes
- 3- +ve family Hx of AA
- 4-onset before puberty
- 5-associated with atopy or Down's syndrome.

Rx:

- -topical or intralesional corticosteroids
- -topical irritants e.g anthralin, tazarotene, azeliac acid
- -topical minoxidil
- -topical immunotherapy e.g diphenylcyclopropenone
- -topical or oral photochemotherapy PUVA
- -systemic corticosteroid (pulsed dosing) if rapidly progressive.
- -Excimer laser

| | - diffuse hair loss :

- 1-androgenetic alopecia (common baldness)
- 2-alopecia totalis or universalis
- 3-telogen efflevium
- 4-deficiency conditions: Fe deficiency, zinc def., malnutrition, malabsorption
- 5-endocrine diseases: hypo & hyperthyrodism, hypopituitarism, hypoparathyrodism.
- 6- drug indused: antimitotic, retinoids, anticoagulants, OCSP.
- 7-severe chronic illness :e.g CRF ,hepatic failure ,TB, neoplastic illnesses.
- 8-unknown causes



Telogen efflevium:

Post physical or mental stress e.g delivery, post-operation Fever etc...

Transient, occurs 3mo after stressful events & may last 6-9mo. With diffuse thinning of hair.



Androgenetic alopecia:

It is physiological event in life of most men but some women May suffer from this problem.

Causes: multifactorial with polygenic control AD.

Pathogenesis:

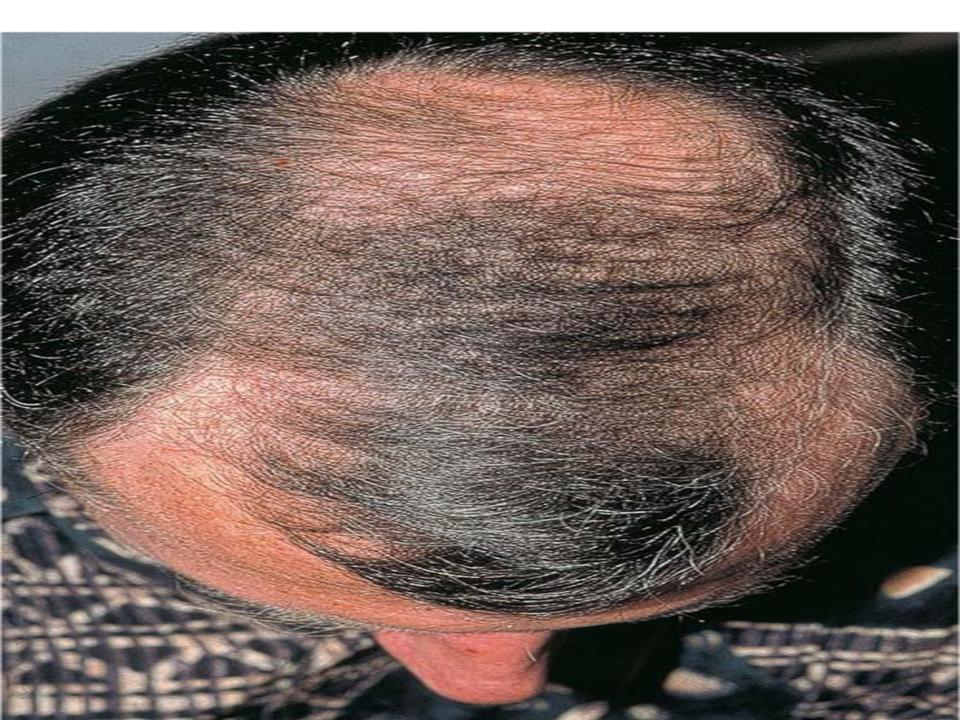
Terminal hair →vellus hair →atrophy & decrease anagen & Increase telogen phase.

C/F:

Both sex are affected but less in female because they have Protective estrogen mechanism.

It usually start after puberty, mean age in male 21 yr, in female 25yr.

Pattern in male fronto-temporal recession +/- supraoccipital In female diffuse hair thinning in crown but midline hair present.



Female pattern



Rx:

There is no actual treatment but we may prolong hair existence:

A.Medical:

1. Systemic: -in male: Finastride

-in female: Finastride, Cyproterone acetate,

-Spironolactone, cimetidine (act as androgen

receptor blockers)

They stimulate villous hair to grow to terminal hair ,but should be for 6-12 months.

They improve with variable degree but recur after stop of Rx.

2. Topical: - Minoxidile 2-5% solution

- Finastride solution

B. Surgery

It is the most effective Rx: from occipital donor area to bald area, transplant hair using micrografts of hair follicles.

Hypertrichosis

Increase hair growth in non-androgen dependant areas.

1-localized: such as melanocytic nevus, Bacher nevus

2-generalize :such as drug intake ,aquire hypertrichosis lanuginosa



Hirsutism

- -common, 61 % of Iraqi women.
- -It is growth of terminal hair in female, as a male pattern Disterbution of hair (androgen dependant areas).
- -on face ,chest ,abdomen & thighs .
- -either increase androgens level or normal androgen with target tissue hypersensitivity.



Causes:

- 1-adrenal: congenital adrenal hyperplasia, cushing syn.
- 2-overian: virilizing overian tumor, PCOS.
- 3-pituitary: increase prolactin
- 4- drugs: minoxidil, diazoxide, cyclosporin
- 5-severe emotional stress
- -PCOS: most important cause, there are some manifestations: amenorrhoea or oligomenorrhoea, obesity, androgenetic alopecia, acne, acanthosis nigricans. in U/S 10 cysts or more, 10 mm in diameter

 LH:FSH ratio =3:1 or more, hyperinsulinaemia.

Investigations:

- 1-blood tests: LH,FSH, prolactin, free testosterone,

 DHEA (dehydroepiandrosterone, adrenal cause)
- 2-24 hr collection of urine for steroid level (CAH)
- 3- U/S overies
- 4- X-ray skull or CT -scan (pituitary adenoma)

RX:

Difficult because poor response or relapse.

1-systenic RX:

- -cyproterone acetate (antiandrogen)
- -ethinyl esradiol (Diane)
- -low dose steroid at night to suppress adrenal release of androgen.
- -androgen receptor blockers : finastride ,spironolactone ,flutamide , cimetidine
- -Metformin: for hyperinsulism
- **2-topical RX**: -hair bleaching
 - -hair epilation : waxes , thioglycate ...etc
 - -electrolysis
 - -laser: Ruby, Alexindarate, Diode laser.

temporary or near perminant removal.

