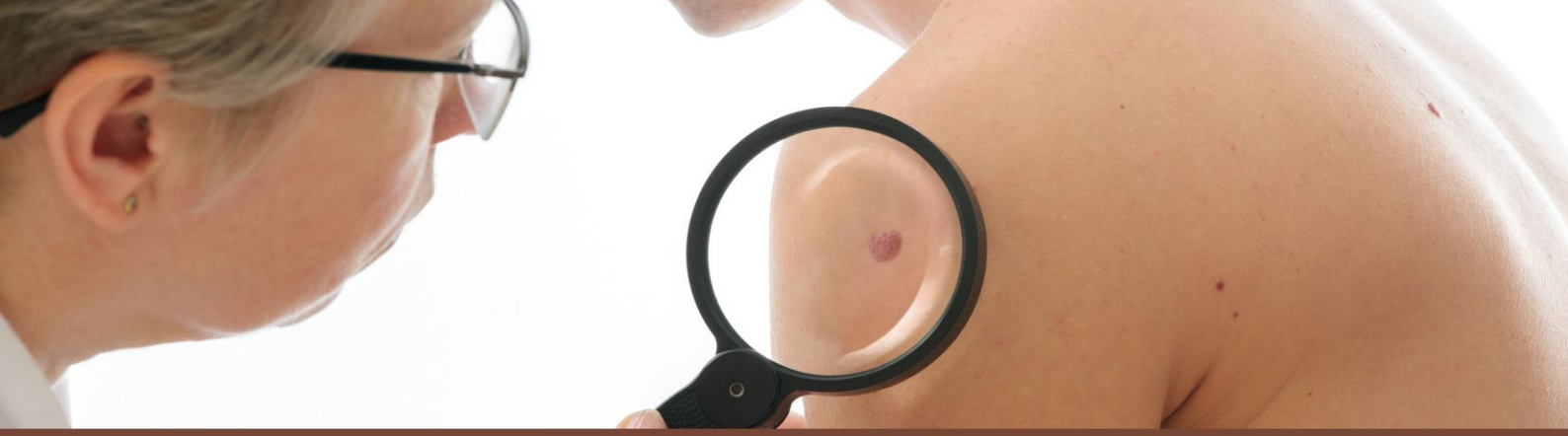

433 Teams

DERMATOLOGY

Lecture (16)

Hair disorders

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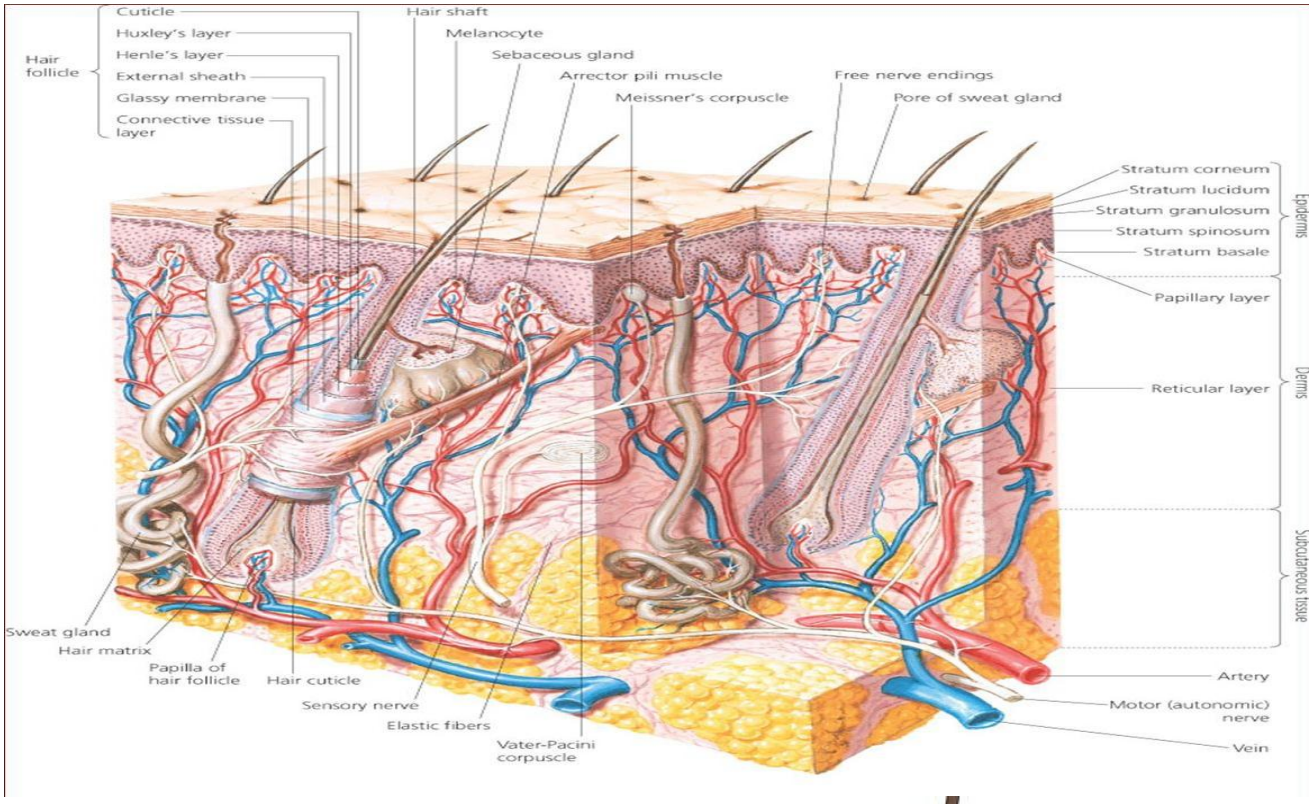
Objectives:

- Normal anatomy of hair follicle and hair cycle.
- Causes, features and management of non scarring alopecia.
- Causes and features of scarring alopecia.
- Causes and features of Excessive hair growth.

Color index: slides, doctor notes, 432 notes

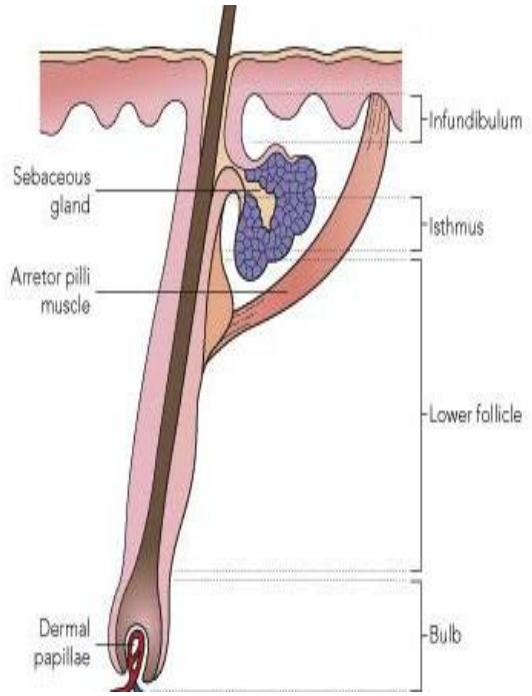
• Anatomy of hair follicle:



Q/ How many hairs in the body?

Ans / 5 millions hairs in the body, 100,000 in the scalp.

• Growth rate: 0.3mm/day for scalp hair 1cm/month

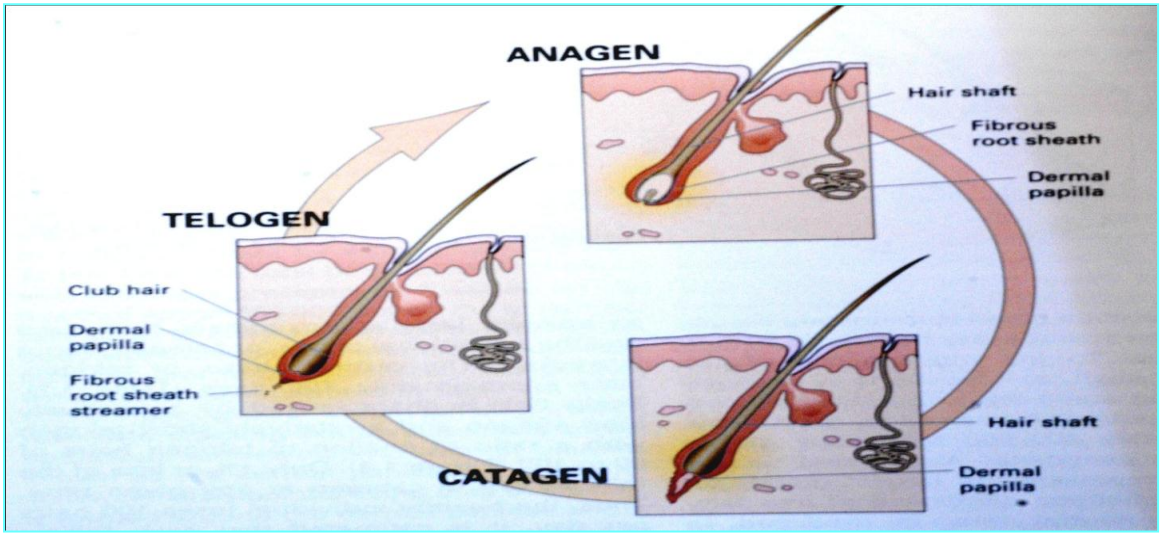


Hair type:

- ✓ Lanugo: covering fetus and newborn baby.
- ✓ Vellous: thin and less color.
- ✓ Terminal: thick and dark color, seen for example, on scalp, eyebrow or axilla.
- ✓ Androgenic hair : Grow during & after puberty in males & females

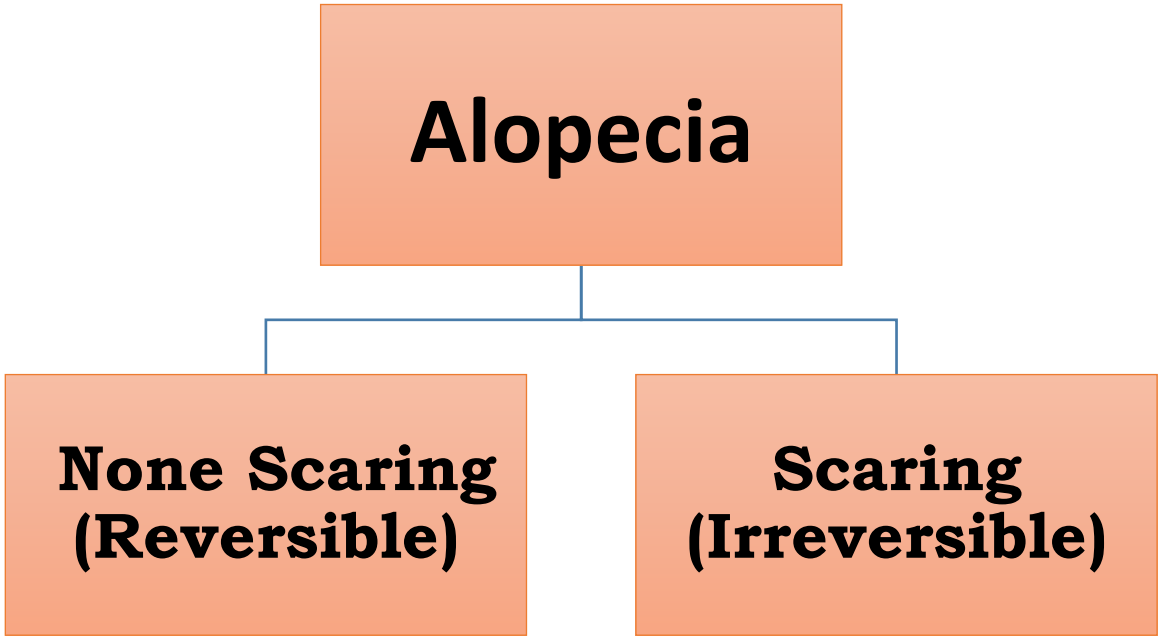
(e.g. axilla, pubic area).

Hair Cycle:



Phase	Region	Time	Description
Anagen	Scalp	2-5 years	Growing of hair. The length of this phase determines the length of the hair
Catogen	Scalp	2 weeks	A short phase of conversion from active growth to the resting phase with degradation of hair follicles.
Telogen	Scalp	2-3 month	A resting phase at the end of which the hair is shed and new hair grow.

Alopecia:



Non-scarring alopecia (reversible):

1- Alopecia Areata:

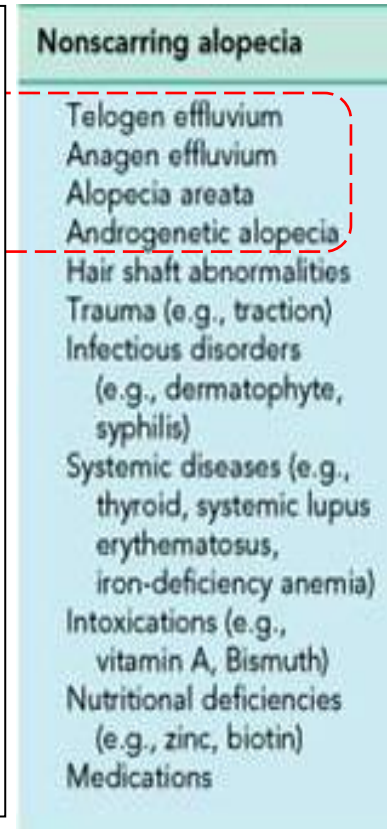
- Sudden hair loss (localized or generalized).
- Alopecia Areata affects up to 2%.
- 75% Self recovery with 2-6 months.
- 30% +ve Family history . Autoimmune.

Clinical findings:

- Well demarcated non-scarring hairless patch.
- Exclamation point. (!)
- Nail: pitting, ridges (indicating severe alopecia).

Types of alopecia areata:

- ✓ Localized partial (1-2).
- ✓ Localized extensive (more than 2).
- ✓ Alopecia ophiasis (occipital and paraital area).
- ✓ Alopecia totalis (Total hair loss in the scalp).
- ✓ Alopecia universalis (whole body).



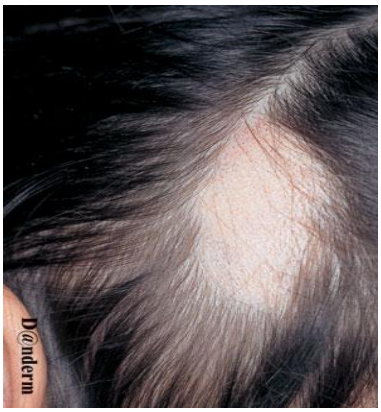
Bad prognostic signs:

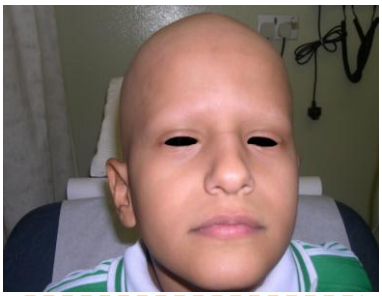
- Young age.
- Atopy.
- Alopecia totalis, universalis, ophiasis.
- Nail changes.

Treatment:

- ✓ Observation.
- ✓ Intralesional Corticosteroids.
- ✓ **Skin Sensitizers**: – Anthraline. – Diphencyclopropenone (DPCP).
- ✓ **Others**: Topical steroids & Minoxidil. – Systemic Steroids. – Cytotoxic Rx. – Phototherapy (PUVA).

Treatment (Doctor Notes)		
Localized		
	Children	**Adults**
First line	Topical steroids	Intralesional Corticosteroids
Second line	Skin Sensitizers	Skin Sensitizers
Totalis		
First line	Skin Sensitizers	
Second line	Systemic Steroids	
Universalis		
Skin Sensitizers + Systemic Steroids		



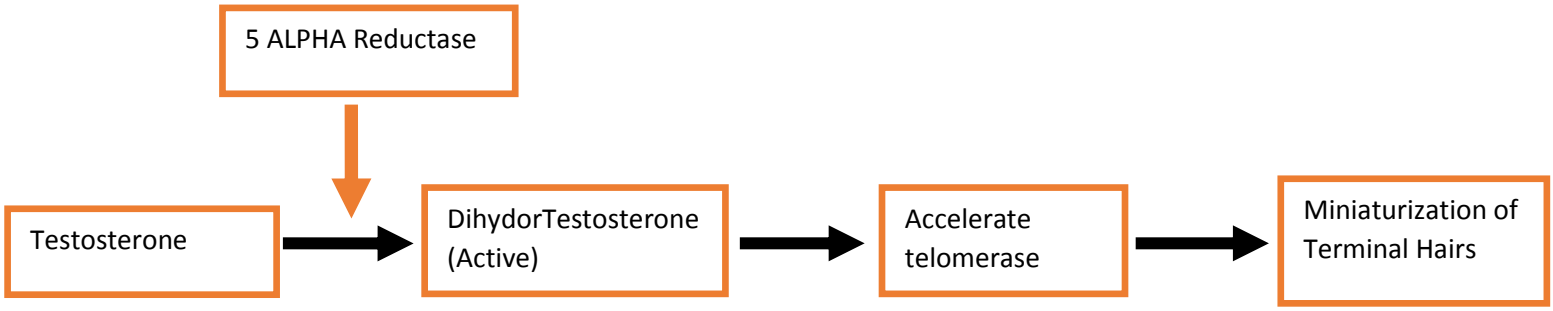


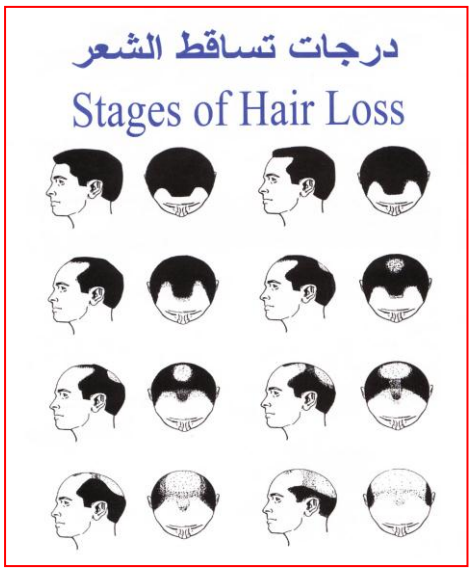
Alopecia universalis

Alopecia ophiasis

2- Androgenetic Alopecia (Male and Female Pattern Hair Loss):

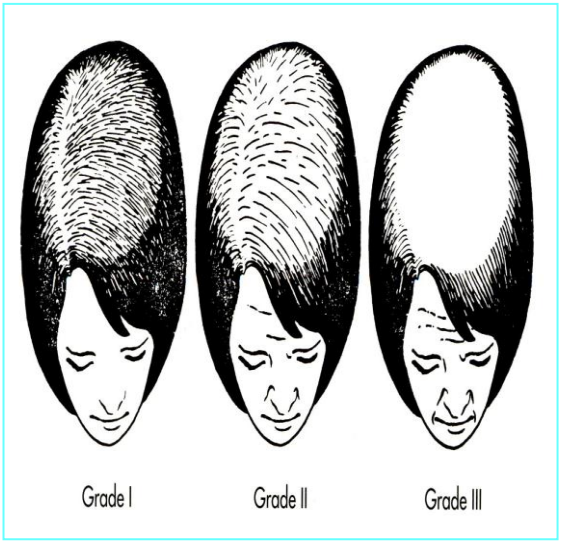
- Androgen dependent loss of scalp hair.
- Androgenetic Alopecia affects up to 50% of males and 40% of females.
- Autosomal dominant with variable penetrance.
- 85% +ve family history.





Male Pattern Hair Loss

(Hamilton stages)



Female Pattern Hair Loss (ludwig)

- ✓ **Male pattern hair loss**: It starts with thinning; it is called fronto-parietal recession and then it goes upwards. It usually spares the Temporal and occipital areas
- ✓ **Female pattern hair loss**: There is no frontoparietal recession and no frontal recession, so the frontal hairline is preserved. There is never complete boldness, there is thinning only. It is more common in postmenopausal women

Minoxidil is a :

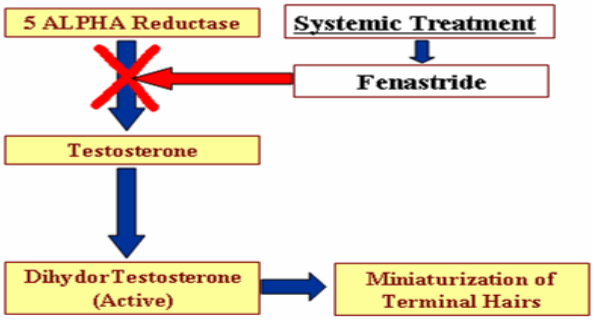
1- Anagen phase inducer.
2- Vasodilator.

Treatment:

Topical: – Minoxidil 2%- 5% solution.

Systemic: – Finastride. – Spironolactone. – OCP.

Hair transplant.



3- Telogen effluvium:

- Acute alopecia.
- Reversible (but may be become chronic).
- 3-4 months from trigger.

Causes:

Physiologic
Physiologic effluvium of the newborn
Postpartum effluvium

Injury or stress
High fever
Severe infection
Severe chronic illness
Major surgery
Hypo- or hyperthyroidism
Crash diets, precipitous decrease of calories or protein (Fig. 11.38)
Iron deficiency
Essential fatty acid deficiency
Biotin deficiency
Drugs (Table 11.8)

Treatment:

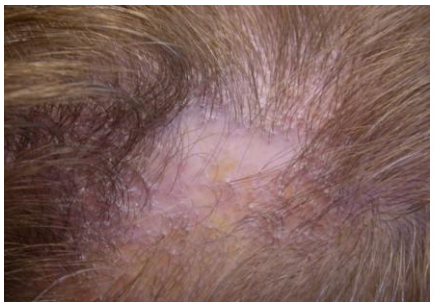
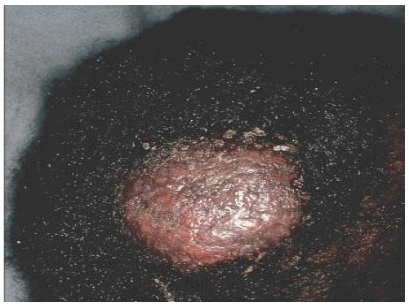
- Remove or treat the cause.
- Minoxidil 2%-5% Solution.

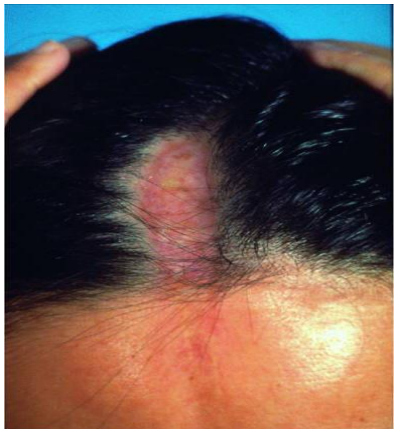
4- Anagen effluvium:

- Always related to cytotoxic chemotherapy.
- Acute and severe alopecia.
- Mostly reversible but not always.
- 2-3 week from trigger.

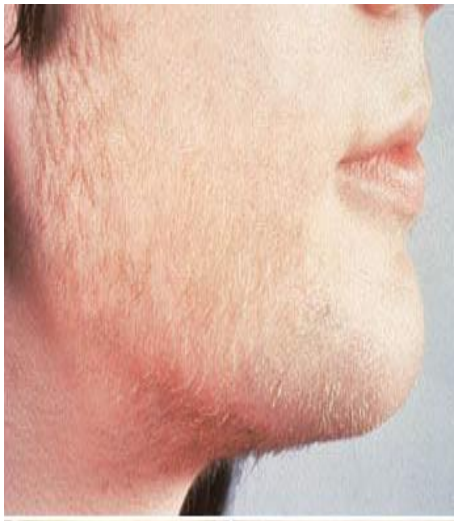
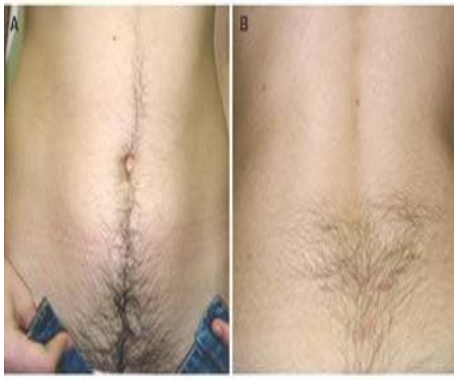
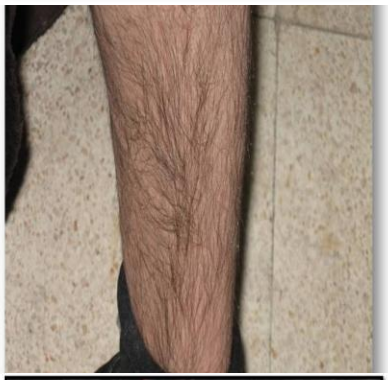
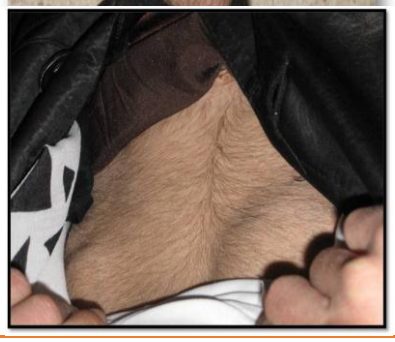
Scarring alopecia(irreversible):

- SLE—DLE.
- LP.
- Sarcoidosis.
- Leprosy.
- Kerion.
- Trauma.



Excessive hair growth:

Type	Hirsutism	Hypertrichosis
Defination	Excess growth of androgen-dependent hair in a male pattern affecting Female	Excess growth of hair in a non-androgenic pattern affecting both sex.
cause	Idiopathic (the commonest). Adrenal, pituitary. Ovarian (PCO). Turner syndrome. iatrogenic (drug).	Congenital. Acquired: drug, porphyria, endocrine: (thyroid , anorexianervosa).
Tretment	Underline cause + laser	
Pictures	 	  

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