



## Hair

\* Definition:

Keratinized product of hair follicle

\* Function:

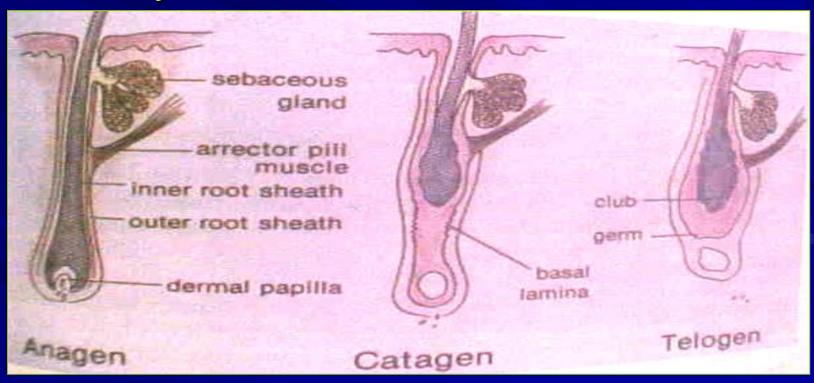
Social & sexual function

\* Development & distribution:

Starts in 9<sup>th</sup> week in embryonic life in eyebrows, upper lip and chin, and then in other regions in 4<sup>th</sup> month

#### \* Types of hair:

- 1- Lanugo
- 2- Vellus
- 3- Terminal
- \* Hair cycle and its control:



# Alopecia

\* Definition:

Loss of hair from normally hairy regions

- \* Alopecia divided into:
  - 1- Cicatricial alopecia
  - 2- Non -cicatricial alopecia

# Cicatricial alopecia

It results from destruction of hair follicles by scar tissue formed in the scalp

- \* Clinical picture:
- Presence of scarring
- Evidence of the cause
- It is a permanent condition

- \* Etiology:
  - a) Congenital
  - b) Acquired:
- 1) Trauma
- Mechanical
- Thermal e.g burns
- Physical e.g radio dermatitis

- 2) Infection
- Pyogenic ( abscess )

- Fungal (kerion and favus)
- Bacillary (LV)
- Spirochaetal (gumma)

#### 3) Collagen disease

- DLE of the scalp
- Scleroderma (morphea )

#### 4) Diseases of unknown etiology

- Pseudopelade
- Folliculitis decalvans





DLE









Folliculitis decalvans

# Non-cicatricial alopecia

- \* Etiology:
  - A) Congenital causes:

Congenital atrichia

Congenital hypotrichia

- B) Acquired causes:
- 1) Circumscribed:
- Alopecia areata
- Infections eg Tinea capitis, secondary syphilis
- Traumatic (Trichotillomania)

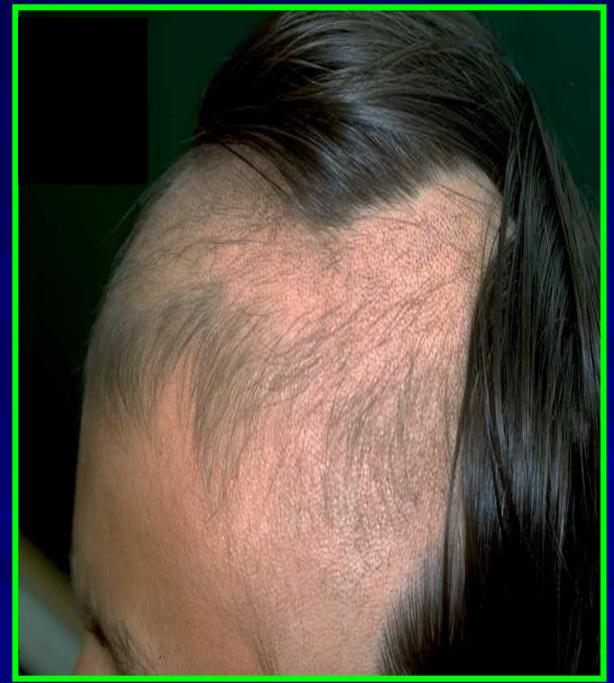
- 2) Diffuse:
- 1) Telogen effluvium
- 2) Anagen effluvium
- 3) Androgenetic alopecia
- 4) Endocrinal (Hypopituitarism, Hypothyroidism, Hyperthyroidism)
- 5) Drugs (thyroid antiagonists, anticoagulants, arsenic and thalium salts)
- 6) Nutritional and metabolic disorder (deficiency of iron, zincor protein)
- 7) Severe chronic illness (malignancy, liver diseases, renal diseases)



2ry \$ ( Moth-eaten alopecia )



Trichotillomania





Trichotillomania

# Alopecia areata

#### \* Definition:

It is a common a symptomatic disease characterized by rapid (Sudden) onset of hair loss in a sharply defined area

### \* Etiology:

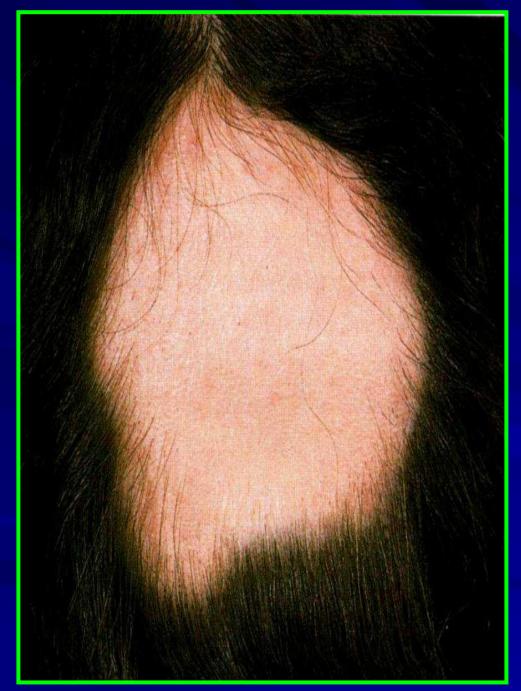
The etiology is unknown but many factors appear to have a role

- Genetic factors
- Immunological factors
- Emotional stress

## \* Clinical picture



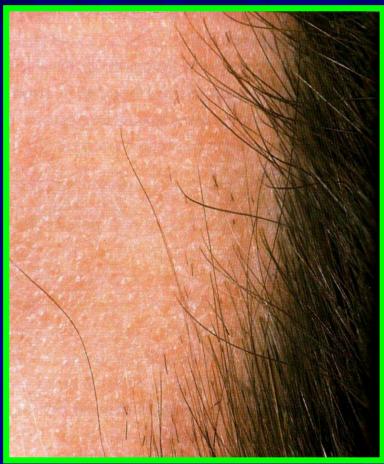
- \* Clinical types:
- Alopecia localisata
- Alopecia totalis
- Alopecia universalis
- Ophiasis





**Exclamation mark** 

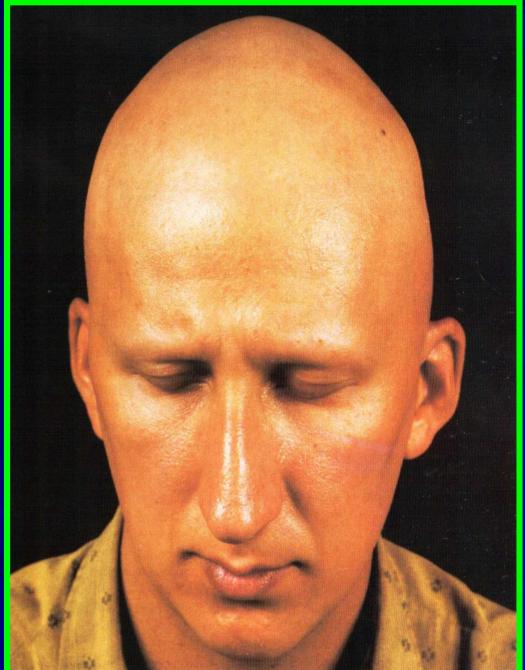


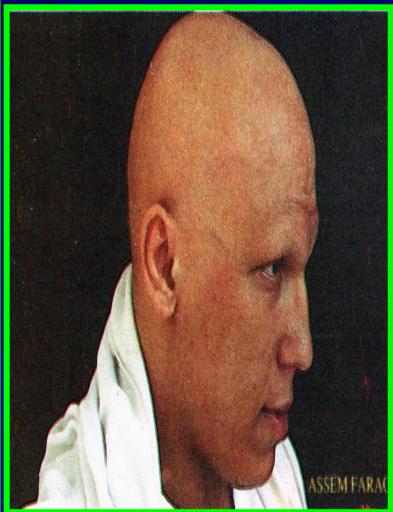


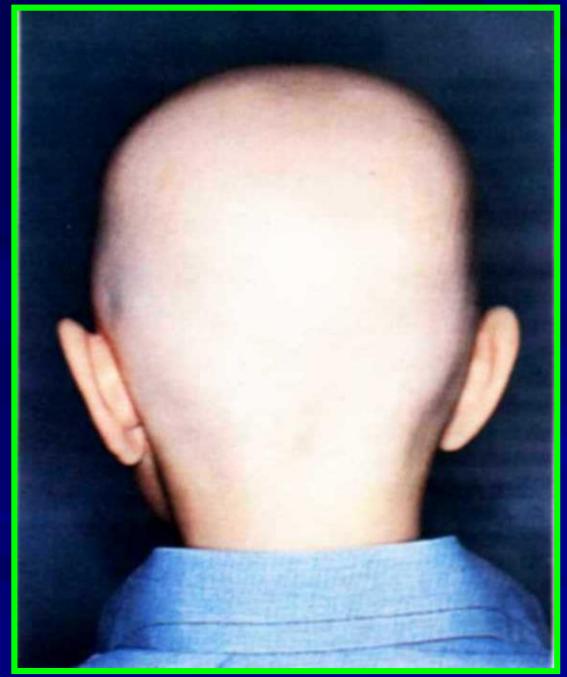
















#### \* Management of AA:

- 1) Reassurance
- 2) Topical treatment:
  - a- Steroid
  - b- Contact immunotherapy (DNCB, DPCP)
  - c- Irritants: as dithranol
  - d- Minoxidil
  - e- Cyclosporine
  - 3) Intralesional steroid
  - 4) PUVA
  - 5) Systemic steroid & cyclosporine

## Androgenetic alopecia

- \* Definition: Physiological process in a genetically predisposed individuals
- \* Etiology:
  - 1- Genetic predisposition
  - 2- Androgen stimulation
- \* Clinical picture:
  - 1- Male pattern
  - 2-Female pattern





- \* Diagnosis:
  - 1- Family history & pattern of hair loss
  - 2- Trichogram & scalp biopsy
- \* Management:
- 1) Topical minoxidil
- 2) Surgical treatment:
  - Scalp reduction & hair transplant
- 3) Camouflage

## Telogen effluvium

#### \* Definition:

Excessive loss of normal hairs following stress conditions as many anagen hair follicles enter prematurely into telogen

#### \* Causes:

- 1- Labor 2- High fever
- 3- Acute blood loss & surgical operations
- 4- Emotional stress
- 5- Crash diet (inadequate protien diet)

#### \* Clinical picture:

Diffuse shedding of hair after 1.5 to 4 months of exposure to stressful condition, in telogen phase

### \* Prognosis:

Good as complete regrowth of hairs occur in about 6 months

