

Excessive Hair Growth

Growth of hairs that are longer, thicker or more numerous than the location, age, and racial background of the patient would predict.

Hirsutism

Increased growth of terminal hairs in androgen-dependent areas, producing male-like hair growth pattern in women. It is a common problem among Iraqi females. Family history is positive in third of cases. Areas of androgen dependence may be affected singly or in combination, these are chin, sides of face, moustache, neck, chest presternally, breast especially around the nipples, upper back and shoulders, linea alba above the umbilicus.

Virilization is the association of hirsutism with other signs of male development, such as voice deepening, clitoral enlargement, increased muscles, loss of breast tissue, acne, and androgenetic alopecia.

Causes:

1- Physiologic: Some degree of hirsutism may be a racial or familial trait constituting most cases of hirsutism. Minor facial hirsutism is common after the menopause

2- Idiopathic: Some patients without a family background of hirsutism become hirsute in the absence of any demonstrable hormonal cause. Probable indemonstrable causes are:

A-Minor ovarian or adrenal dysfunction,

B-local increased 5 α reductase activity, or

C-Increased number of androgen receptors at hair follicles.

D-Increased sensitivity of androgen receptors at hair follicles.

3- Iatrogenic: Phenytoin, androgens, corticosteroids, contraceptives (progesterone has androgen action)

4- Symptomatic: Some patients with hirsutism will have one of the following disorders

- A- Ovarian: Polycystic ovary disease, virilizing tumors.
- B- Adrenal: Congenital adrenal hyperplasia virilizing tumors.
- C- Pituitary: Cushing disease, acromegaly, prolactinoma
- D- Ectopic virilizing bronchogenic or GIT carcinomas.

Investigations

Women with a normal menstrual cycle and no signs of virilization are unlikely to have a significant endocrine cause for their hirsutism. Investigation is needed if these symptoms are present. Tests might include: blood levels of LH, FSH, testosterone, prolactin; urinary free cortisol; CT scan of suprarenal areas; pelvic ultrasound, Skull X-ray..etc

Therapy

Often unsatisfactory and needs continuous use, usually with relapse after treatment discontinuation.

A- *Treat underlying disease.*

B- *Removal of hairs:*

- 1- Shaving, wax epilation, thread epilation, chemical epilation.
- 2- Bleaching (6–10% hydrogen peroxide in water).
- 3- Destruction of individual hair follicles by electrolysis or thermolysis.
- 4- Photoepilation (with lasers or intense pulsed light source);
much faster and more effective.

5-Eflornithine (topical) effective but only as long as used; expensive.

C-Systemic therapy:

1-Primary antiandrogen: Flutamide, Cyproterone acetate.

2-Agents with secondary antiandrogen activity: Spironolactone.

3-GRH agonists: leoprolide and nafarelin.

4- 5- α -Reductase inhibitor: Finasteride 2.5-5 mg daily.

5-Combination therapy.

Hypertrichosis

Excessive growth of terminal hair that does not follow an androgen-dependant pattern.

A- Hypertrichosis lanuginosa

1-Hypertrichosis lanuginosa congenita:

Uncommon genodermatosis in which newborn is covered by long lanugo hairs, which are not shed and replaced, but continue to grow. Patient typically winds up with a silvery coat of hairs 10 cm long.

2-Hypertrichosis lanuginosa acquisita:

The sudden profuse covering of the skin by white lanugo hairs is a reliable marker of internal malignancy (e.g. lung, colon, or breast, as well as others)

B- Generalized Hypertrichosis

The entire body seems affected with regional differences. There are many causes for diffuse excess numbers of terminal hairs:

1-Hereditary: Porphyria cutanea tarda, mucopolysaccharidoses, chromosome abnormalities (trisomy 18).

2-Endocrine: Pituitary and thyroid disorders.

3-Eating disorders: (especially anorexia nervosa), malabsorption, fetal alcohol syndrome.

4-Medications: Cyclosporine, minoxidil, phenytoin are most common

C- Localized (nevus) hypertrichosis

1-Becker nevus: Localized mosaic area of increased melanin and increased hair growth.

2- Faun tail nevus: Localized hair growth over sacrum; a serious marker for potential underlying spinal cord defects or spina bifida. Neurological and radiological work-up mandatory.

3-Hair nevus: localized area with excess hair follicles and no other abnormalities; Uncommon.