



The Association of Minimally Invasive Gynecologic Surgeons

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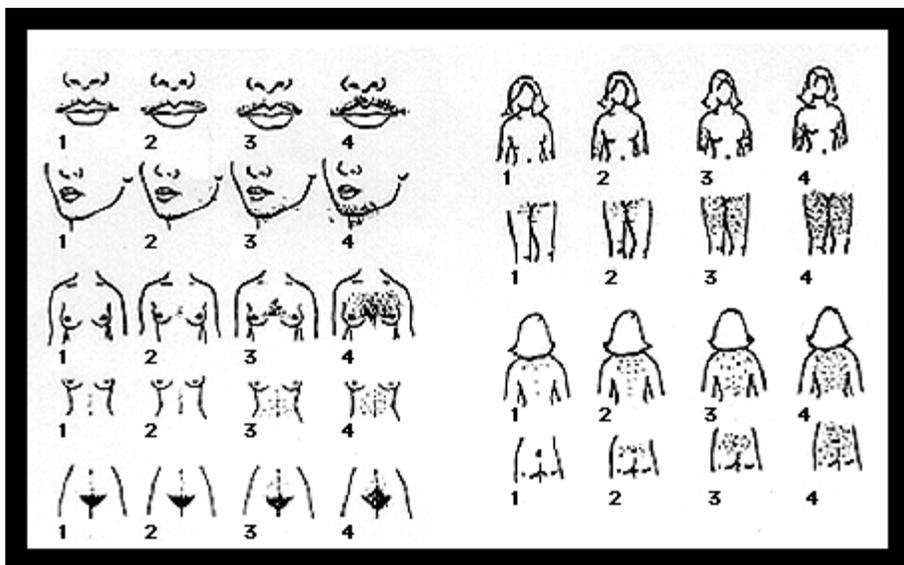
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INTRODUCTION — Hirsutism refers to the growth of coarse, dark hair in areas where women typically grow fine hair or no hair at all - above the lip, and on the chin, chest, abdomen, and back). This growth is caused by an excess of any of the hormones called androgens (male hormones), which all women have in them normally.



Grading of severity of hirsutism in women Hirsutism scoring standards at different sites showing the spectrum from minimal hirsutism (grade 1) to frank virilization (grade 4).

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Hirsutism warrants medical attention, especially if it develops or worsens rapidly in a woman aged 20 years or older, or if her relatives have comparatively less hair growth. In the vast majority of cases, hirsutism is not caused by serious or malignant medical conditions; however, the cause of hirsutism should be established and underlying conditions that pose related health problems should be treated.

Sometimes, the decision to treat hirsutism is a matter of personal choice. When it comes to the amount of body hair, there is a wide range of normal among women. Race and ethnicity play a major role in the growth of body hair: for example, Asian and Native American women tend to have little body hair, whereas Middle Eastern and Mediterranean women tend to have moderate to large amounts of body hair. Our culture also determines how much hair is cosmetically acceptable and how important we feel it is to

treat hirsutism. The psychological impact of hirsutism can range from annoying to severely disabling. Any woman who is troubled by hirsutism should not hesitate to ask her doctor about treatment options.

CAUSES OF HIRSUTISM — Hirsutism is caused by an excess production or action of androgens, usually by the ovaries or adrenal glands. Several different conditions can lead to hirsutism. The two most common causes of hirsutism are polycystic ovary syndrome (PCOS) and idiopathic hirsutism. Both are diagnosed by physical examination, medical and family history, and, sometimes, blood tests that help exclude the rare causes of hirsutism.

Polycystic ovary syndrome — Women with PCOS often have hirsutism in combination with acne, balding near the front of their head, and menstrual irregularities. PCOS is a chronic condition, but several treatments can alleviate the hirsutism. PCOS is also associated with other medical problems such as infertility due to the irregular menstrual cycles, obesity, diabetes mellitus, high cholesterol levels, and possibly heart disease. It is important to identify any or all of these problems because effective treatments are available.

Idiopathic hirsutism — Idiopathic hirsutism refers to hirsutism that has no identifiable cause. Doctors suspect that it may be a mild variation of PCOS and, like PCOS, idiopathic hirsutism is usually chronic. A gradual, increased growth of coarse body hair is typically the only symptom in women with this condition. Menstrual cycles are always normal in women with idiopathic hirsutism.

Rare causes of hirsutism — In rare cases, hirsutism can be caused by hormone-secreting tumors of the ovary or adrenal gland, by an ovarian condition called hyperthecosis (which may be an extreme form of PCOS), by certain medications that have androgen-like effects, and by an inherited condition called congenital adrenal hyperplasia.

The hirsutism associated with these conditions often develops abruptly in women over age 20 (rather than at the time of puberty) and progresses rapidly. The sudden growth of body hair may be accompanied by other signs of marked androgen excess, such as deepening of the voice and increased muscle mass.

TREATMENT OF HIRSUTISM — The treatment of hirsutism will depend upon the underlying cause. The goals of treatment are to:

- Address any serious underlying medical conditions
- Slow or stop new hair growth
- Remove or camouflage the existing hair
- Address any related health problems, such as menstrual irregularities
- Anticipate any associated long-term health conditions, such as cardiovascular disease

Before prescribing any treatment, your doctor will carefully assess your degree of hirsutism, so that the effectiveness of treatment can be gauged over time.

TREATMENT OF THE HIRSUTISM OF PCOS AND IDIOPATHIC HIRSUTISM — The hirsutism of PCOS and idiopathic hirsutism are treated in similar ways. The treatment of PCOS may further involve treatment of infertility, diabetes, and risk factors for cardiovascular disease.

Hair removal and lightening — Several methods can be used to physically remove excess hair or to lighten it and make it less noticeable. These methods can be used in conjunction with medication. Women with hirsutism who are trying to conceive or are already pregnant cannot take medications used to treat

hirsutism, and should ask their doctors about the safety of the various mechanical and chemical treatment methods during pregnancy.

Shaving — Shaving is a safe and effective method for hair removal, but may require daily sessions.

Chemical depilation, waxing, and bleaching — Depilatory agents and wax can be used to remove hair, and bleaches can be used to lighten hair. Depilatories and bleaches may cause skin sensitivity in some women, so be certain to follow the directions for patch testing.

Electrolysis — Electrolysis damages individual hair follicles with an electric current so they do not grow back. This treatment is safe and effective, but expensive. Furthermore, large areas often require long-term treatment. Ask your doctor about guidelines for selecting a qualified electrologist.

Laser hair removal — Laser hair removal is effective for many with hirsutism, particularly those who are fair-skinned with dark hair. Studies of the effectiveness of laser removal are encouraging. Although laser is more expensive than electrolysis, it appears to be faster and less painful.

Creams — Vaniqa (eflornithine hydrochloride cream 13.9 percent) is a skin cream that has been approved by the U.S. Food and Drug Administration for the treatment of unwanted facial hair in women. It does not remove hair permanently, but seems to slow its growth. It is not yet known how effective this cream will be.

Weight loss — Weight loss in overweight women can decrease levels of androgens and lessen hirsutism. Women with menstrual irregularities may also notice that their cycles become more regular after they lose weight.

Medications — Several medications are available for the treatment of hirsutism. These medications can decrease the distribution of body hair, halt the growth of new hair, and decrease the growth rate and coarseness of existing hair. Most of these medications must be taken for at least six months before improvement is detectable, and not all medications are equally effective in all women.

Oral contraceptives — Oral contraceptives alter levels of several hormones, including androgens. They are usually the first choice for the treatment of hirsutism, and between 60 and 100 percent of women with hirsutism will notice improvement when taking these medications. Oral contraceptives can also help establish regular menstrual cycles in women with hirsutism who have irregular cycles or who do not menstruate at all.

One new pill, Yasmin, has become popular with many women for the treatment of hirsutism. However, it has not been shown that Yasmin is any more effective than other birth control pills.

Oral contraceptives can cause side effects, such as high blood pressure and high cholesterol levels. Therefore, your doctor may order tests before prescribing oral contraceptives.

Antiandrogens — Antiandrogens directly decrease androgen production or block the action of androgens on the hair follicle. Because these medications may cause birth defects, doctors usually also prescribe oral contraceptives for sexually active women who take antiandrogens.

- Spironolactone is usually prescribed if a six-month trial of oral contraceptives does not reduce hirsutism. Between 60 and 70 percent of women with hirsutism will notice improvement when taking

spironolactone. If the initial dose is not effective after several months of treatment, your doctor may recommend a higher dose.

- Finasteride may be as effective as spironolactone in some women with hirsutism. It is not approved for use in women in the United States, but is available as a medication for male pattern balding (Propecia) or prostate cancer (Proscar) in men. However, many insurers will not cover the costs of finasteride for cosmetic reasons in either women or men.
- Cyproterone acetate reduces hirsutism in about 70 percent of women, but is currently unavailable in the United States. It is used commonly in Europe and Canada, where it is a component of a type of birth control pill.

Metformin — Metformin is a medication that is commonly used for the treatment of type 2 diabetes (adult-onset). However, it is also sometimes used for women with polycystic ovary syndrome (irregular periods and hirsutism or acne) to help make periods more regular and possibly improve fertility. Some women also note some improvement in their hirsutism with metformin, but it does not appear to be as effective as the other medications mentioned above.

TREATMENT OF THE RARE CAUSES OF HIRSUTISM — The treatment of most of the rare causes of hirsutism is targeted at the underlying condition; hirsutism may lessen or resolve with effective treatment.

Hormone-secreting tumors — Hormone-secreting tumors can be surgically removed and may require additional chemotherapy or other medications.

Medications — A careful review of medications can identify medications that may cause hirsutism, such as danazol, a medication used to treat endometriosis, and certain oral contraceptives that have androgen-like actions. Your doctor may prescribe a lower dose of the medication or alternative medications or treatments.

Congenital adrenal hyperplasia — Congenital adrenal hyperplasia is a rare chronic condition that is usually treated with corticosteroids.

Hyperthecosis — Hyperthecosis is often treated with antiandrogen medications. Your doctor may also recommend surgical removal of the ovaries because of the associated risk of ovarian cancer.

EXPECTATIONS OF TREATMENT — The treatment of hirsutism requires patience because hair follicles have a life cycle of about six months. Most medications must be taken for three to six months before a noticeable improvement occurs. In the meantime, the existing hair can be mechanically removed or bleached, and some women may continue to use these methods in combination with medication.

Your doctor will monitor the progress of treatment and may repeat any tests if he or she is concerned about an underlying condition. If a medication is ineffective initially, your doctor may change the dose or recommend a trial of a different medication. It is important to have realistic goals for the reduction of body hair and to place these goals within the context of your racial and ethnic background.

DURATION OF TREATMENT — The treatment of hirsutism is usually continued indefinitely because, in most cases, the body continues to produce excess androgens. However, women must discontinue all medications currently used to treat hirsutism before becoming pregnant. Furthermore,

some women eventually decide that the results of treatment are not worth the time, effort, and cost, or they grow more comfortable with their body and the presence of body hair.

WHERE TO GET MORE INFORMATION — Your doctor is the best resource for finding out important information related to your particular case. Not all patients with hirsutism are alike, and it is important that your situation is evaluated by someone who knows you as a whole person.

This discussion will be updated as needed every four months on our web site (www.uptodate.com). Additional topics as well as selected discussions written for health care professionals are also available for those who would like more detailed information.

Some of the most pertinent include:

Professional Level Information:

[Clinical features and diagnosis of polycystic ovary syndrome in adolescents](#)

[Evaluation of women with hirsutism](#)

[Pathogenesis and causes of hirsutism](#)

[Treatment of hirsutism](#)

[Clinical manifestations of polycystic ovary syndrome in adults](#)

[Diagnosis and treatment of polycystic ovary syndrome in adults](#)

[Treatment of polycystic ovary syndrome in adolescents](#)

[Use of GnRH agonists in the treatment of hyperandrogenism and hirsutism](#)

[Adrenal hyperandrogenism](#)

A number of other sites on the internet have information about hirsutism. Information provided by the National Institutes of Health, national medical societies, and some other well-established organizations are often reliable sources of information, although the frequency with which their information is updated is variable.

- National Library of Medicine

(www.nlm.nih.gov/medlineplus/)

- National Institute of Diabetes and Digestive and Kidney Diseases

(www.niddk.nih.gov/)

- The Hormone Foundation

(www.hormone.org)