Practice Guidelines

Gender-Dysphoric/Gender-Incongruent Persons: Treatment Recommendations from the Endocrine Society

Key Points

- Hormone treatment for prepubertal gender-dysphoric/gender-incongruent persons is not recommended.
- Adolescents meeting the diagnostic and treatment criteria should undergo initial hormone treatment to suppress pubertal development after exhibiting physical changes of puberty.
- It is important to evaluate medical conditions that can be made worse by hormone depletion and treatment.
- Clinical evaluation for adverse changes in response to treatment should be monitored every three months during the first year, then once or twice yearly.

From the *AFP* Editors

Gender-dysphoric/gender-incongruent persons require a safe and effective hormone regimen that will suppress sex hormone secretion determined by the person's genetic sex and maintain sex hormone levels within the normal range for the person's affirmed gender. These persons are referred to an endocrinologist for treatment to develop physical characteristics of the affirmed gender. Physicians who recommend these treatments should be appropriately trained and familiar with the diagnostic criteria and specifications for gender-affirming treatment, have training and experience in assessing psychopathology, and participate in the ongoing care throughout the endocrine transition. Hormone treatment for prepubertal gender-dysphoric/gender-incongruent persons is not recommended.

These recommendations are an update to the clinical practice guideline on endocrine treatment of transsexual persons published in 2009 by the Endocrine Society.

Recommendations

ADULT AND YOUTH EVALUATION

Only trained mental health professionals should diagnose gender dysphoria/gender incongruence in adults. They should be competent in using the *Diagnostic and Statistical Manual of Mental Disorders* and the *International Statistical Classification of Diseases and Related Health Problems* for diagnostic purposes. They should be able to distinguish between gender dysphoria/gender incongruence and other similar conditions, and have sufficient training to diagnose psychiatric conditions. They should have the ability to initiate, or refer for, appropriate treatment and psychosocially assess the patient's mental health.

When diagnosing children and adolescents, mental health professionals should have training in child and adolescent developmental psychology and psychopathology, and knowledge of the specifications for puberty-blocking and gender-affirming hormone treatment in adolescents in addition to the criteria for diagnosing adults. Puberty-blocking and gender-affirming hormone treatment is not recommended in prepubertal children, and the social transition of these patients should be made with the assistance of a mental health professional or other experienced professional. Physicians should inform all patients seeking gender-affirmation treatment of their options for preserving fertility.

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This series is coordinated by Sumi Sexton, MD, Editor-in-Chief.

A collection of Practice Guidelines published in *AFP* is available at http://www.aafp.org/afp/practguide.

CME **This clinical content** conforms to AAFP criteria for continuing medical education (CME). See CME Quiz on page 565.

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ADOLESCENT TREATMENT

It is recommended that adolescents meeting the diagnostic criteria for gender dysphoria/gender incongruence and specifications for treatment undergo initial treatment to suppress pubertal development soon after exhibiting physical changes of puberty. When indicated, gonadotropin-releasing hormone analogues should be used to suppress pubertal hormones. However, sex hormone therapy, including estrogen and testosterone (which may have partially irreversible effects), should be initiated using a gradual dose schedule only after a team of medical and mental health professionals confirm the persistence of gender dysphoria/gender incongruence and the mental capacity to give informed consent. This usually occurs by 16 years of age. If sex hormone treatment is warranted in adolescents younger than 16 years, care should be managed by a multidisciplinary team of medical and mental health professionals. Pubertal development should be monitored every three to six months and laboratory parameters every six to 12 months during treatment.

HORMONE THERAPY FOR TRANSGENDER ADULTS

Physicians should confirm that patients meet the criteria for gender dysphoria/gender incongruence before beginning treatment. It is important to evaluate medical conditions that can be made worse by hormone depletion and treatment. Hormone levels should be measured during treatment to ensure that endogenous sex steroids are suppressed and that administered sex steroid levels for the affirmed gender are within normal range. It is recommended that endocrinologists educate patients about onset and time course of physical changes caused by treatment.

ADVERSE OUTCOME PREVENTION AND LONG-TERM CARE

Clinical evaluation for physical and potential adverse changes in response to treatment should be monitored every three months during the first year, then once or twice yearly. Cardiovascular risk factors should be evaluated, and bone density measurements should be obtained when there are risk factors for osteoporosis. Physicians should determine the medical necessity of a hysterectomy and oophorectomy as part of gender-affirming surgery. Transgender females who are treated with estrogens should have prolactin levels monitored periodically and follow individualized screening for prostatic disease and prostate cancer based on personal risk. If there is no increased risk of breast cancer, patients should follow screening guidelines for non-transgender females.

GENDER-AFFIRMING GENITAL SURGERY

Gender-affirming genital surgery should be pursued only after a mental health professional and the physician responsible for endocrine transition therapy both confirm that surgery is medically necessary and would benefit the patient's health and well-being. Approval for surgery should not be given before the patient has completed at least one year of consistent hormone treatment, unless hormone therapy is not desired or is medically contraindicated. Hormone-treated transgender patients can be referred for genital surgery by a physician when the individual has had a satisfactory social role change, is satisfied with the hormone effects, and desires surgical changes. Collaboration is recommended between the physician responsible for endocrine treatment and the primary care physician to ensure appropriate medical clearance, and with the surgeon regarding hormone use during and after surgery. Physicians should delay gender-affirming genital surgery involving gonadectomy and hysterectomy until the patient is at least 18 years of age. There is insufficient evidence to recommend a specific age requirement for the timing of breast surgery in transgender males; physicians should make this decision based on the physical and mental health status of the patient.

Guideline source: Endocrine Society

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Guideline developed by participants without relevant financial ties to industry? No

Recommendations based on patient-oriented outcomes? Yes

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Jennifer Wilkes
AFP Editorial Coordinator ■