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OUT OF THE SHADOWS: IT IS TIME TO MAINSTREAM TREATMENT FOR TRANSGENDER PATIENTS

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INTRODUCTION

The biggest barrier to safe hormonal therapy for transgender patients is the lack of access to conventional care. Because transgender treatment is not taught in conventional medical curricula, few physicians are comfortable with the treatment of transgender conditions. Thus, transgender patients, already stigmatized by societal discomfort with sexual issues, may incur additional risk by seeking treatment from dubious sources such as the Internet or inexperienced health-care providers.

A major concern raised by physicians is anxiety about the legitimacy of hormonal treatment. Many physicians share the misconception that transgender treatment is a psychologic issue best managed with psychiatric intervention (behavioral therapy, psychotropic medication, or both). The assumption is that gender identity can be reversed. Nevertheless, available data do not support the notion that gender identity can be reversed by external forces. Rather, the data in the medical literature to date are consistent with gender identity being fixed.

Once the permanent nature of gender identity is recognized, the required treatment regimens and monitoring recommendations are often straightforward. Increased knowledge of and experience with treatment of transgender conditions by physicians would enhance access to safe care for transgender patients. Therefore, we advocate including transgender treatment in the standard medical curriculum. To support our position, we will review the data regarding the relative rigidity of gender identity and discuss the treatment implications for transgender patients.

EVIDENCE THAT GENDER IDENTITY IS NOT REVERSIBLE

The best data to support the notion that gender identity is irrevocable are available from the literature regarding outcomes of genetic male subjects raised as female subjects because of ambiguous genitalia, penile ablation, or agenesis (1-3). Although the studies are small, they represent the most rigorous assessments to date. For these patients, the dogma has been to create female external genitalia because that approach is most cosmetically feasible with current surgical techniques.

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DISCLOSURE

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Reiner and Gearhart (4) published the best evaluation of failure in altering gender identities. They reviewed their entire cohort of patients with XY genotype and cloacal exstrophy who underwent gender-reassignment surgical treatment. Despite the gender recommendation, 2 sets of parents raised their children as boys. Of the remaining 14 raised as girls, 4 spontaneously announced that they were male, and an additional 4 chose to live as boys when they became aware of their genotypes. One child left the study after learning of her XY genotype. The 5 who continued to live as girls were all unaware of their genotypes. When the authors evaluated socialization, they found that the 10 living as male subjects were more comfortable with sexuality and much better integrated with their peers than the 5 living as female subjects.

Meyer-Bahlburg et al (5) published further evidence of the inability of external factors to alter gender identity. The purpose of the study was to record the degree of satisfaction with surgical intervention reported by individuals with XY genotype. Those raised as girls were more satisfied with the surgical outcome achieved. In contrast, however, those raised as boys were considerably more comfortable with their gender identity.

A review of the literature on XY male persons raised as female because of penile agenesis, cloacal exstrophy, or penile ablation found that 27 of 77 subjects declared that they were male or had gender dysphoria (6).

Although the data may suggest that gender identity is unalterably determined in utero, gender identity is not chromosomal. With testicular feminization from complete androgen receptor resistance, female gender identity is the norm despite the XY genotype (7).

An organic explanation for altered gender identity has been derived from brain autopsies from transsexual patients. In the hypothalamus, the bed nucleus of the stria terminalis (BST) is thought to be important for gender identity. One study showed that male-to-female transsexuals had decreased BST staining identical to that for genetic XX female subjects (8). In contrast, genetic XY male subjects had significantly increased BST staining. BST staining was not influenced by sexual orientation or sex hormone levels. Despite being small, this study provides a starting point for future research.

Although there are only a few published studies to support the nature of gender identity as fixed, there is no convincing literature supporting the contention that gender identity can be manipulated by external forces. A 1972 publication that proposed to support such a notion was merely an assemblage of case reports describing boys who failed to conform to expectations of “male” behavior patterns during childhood (9). Descriptions of the expected behavior patterns read like parodies of stereotypical behavior. Reported behavioral suggestions for a boy with *potential* female gender identity include “teaching him to play ball and fight...” and to “run like a boy.” It is no surprise that the boys were “convinced” to have male gender identity through childhood counseling. In fact, there is no evidence that they initially lacked male gender identity.

OPTIONS FOR INDIVIDUALS WITH A GENDER IDENTITY OPPOSITE TO PHYSICAL APPEARANCE

Treatment options for patients with gender identity at variance with physical appearance can be evaluated in the order of extent of invasiveness. The least invasive intervention would be counseling such patients to accept the circumstance. As already noted, however, no available data support the success of such therapy. The next least invasive approach might be a targeted treatment of the underlying problem. The medical community, however, has little knowledge about the brain region associated with gender identity, and even less is known about techniques for manipulating it.

Although current transgender treatment is relatively invasive and does not address the problem completely, it is the most successful intervention available. Studies report very high transgender patient satisfaction with sexual reassignment. Thus far, the largest evaluation has been a survey of Dutch transgender patients (10). Among the 1,285 patients surveyed, 1,280 were satisfied.

CLASSIC PITFALLS CAN BE IDENTIFIED AND ADDRESSED

In addition to the treatment risks of hormone therapy, there are two other concerns peculiar to transgender treatment. The first concern is to avoid inappropriate treatment of patients with psychiatric issues manifesting as altered gender identity. Although most patients desiring transgender hormone treatment will be straightforward, such patients should undergo appropriate screening for confounding psychiatric issues by qualified personnel.

The second unique concern is recognition of the issues surrounding treatment of children. Teenagers and young adults are vulnerable to societal discomfort with sexual issues. These patients could benefit substantially from living in the gender with which they identify. The teenage and young adult years are typical periods for lifestyle experimentation. The population will include individuals who might solicit transgender treatment without truly identifying with the opposite gender. Indeed, most children who question their gender identity will not transition to the opposite gender. Many of the gender-specific physical characteristics developed during puberty are permanent. The risk of inappropriate treatment is high. Nonetheless, the benefits of appropriate treatment are also high. Therefore, children must be provided appropriate specialized care.

CONCLUSION

Transgender patients seek medical treatment to change external appearances to correspond to their gender identification. Environment may have a role in the manifestation of the condition and the personal choices about the priority the situation may take in a specific individual's life. Gender identity, however, reflects neither environment nor postnatal sex steroid hormone levels. Rather, gender identity is fixed. The stated gender identity of most adults can be taken at face value.

Although we advocate a conservative approach to transgender diagnosis and treatment advancement, we propose increased access to appropriate care for transgender patients. Increased access to such care could be achieved by including general internists, general endocrinologists, gynecologists, surgeons, and other physicians in their areas of expertise as routine providers of transgender care. In order to achieve this goal, transsexual treatment would need to become part of the standard medical curriculum.

Abbreviation

BST bed nucleus of the stria terminalis

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