Gender-Affirming Hormone Therapy Among Transgender and Gender Diverse Patients Receiving Laser Hair Removal Prior to Gender-Affirming Surgery

Gretchen Bellefeuille BS, Katherine Plampton BS, Rumbidzai Ngonyama, BS, Matthew Mansh MD, Maria Hordinsky MD, Ronda S. Farah MD

Department of Dermatology, University of Minnesota Medical School, Minneapolis, MN

Dear Editor,

Preoperative laser hair removal (LHR) of donor tissue sites prior to gender-affirming surgeries (GAS), such as vaginoplasty or phalloplasty, is performed to prevent post-surgical hair complications.[1] Hair removal on the face and chest are considered key for gender transition among transfeminine individuals. Gender-affirming hormone therapy (GAHT) can affect hair growth. Therapies may include estradiol, spironolactone, finasteride and testosterone. Diminished hair growth has been reported with feminizing hormone therapy in transfeminine individuals, while testosterone promotes hair growth[4] and is associated with reduced anxiety and depression in transgender men.[2,3] Transmasculine individuals receiving testosterone demonstrate increased body hair that has been shown to more closely resemble cisgender men as compared to transgender men and cisgender women not receiving this medication.[2,4]

Little data exist on the prevalence and type of GAHT received among transgender and gender diverse (TGD) patients pursuing LHR. Currently, TGD individuals may face poor access to gender-affirming dermatologic care, and few data exist on hair removal procedures for genital GAS.[5,6] In this study, we aimed to characterize GAHT in TGD patients presenting for LHR.

In this single-center, retrospective chart review we identified study participants among patients presenting to the University of Minnesota Department of Dermatology between 01/01/2017 and 11/30/2020 using gender dysphoria (ICD-10 code F64.9) in combination with current procedural terminology 17999 and cash-based hair removal institutional codes. We excluded duplicates, research opt-outs, and patients without a LHR procedure. Two research staff conducted the review, while one board-certified dermatologist resolved discrepancies. Descriptive outcomes included patient demographics, intended GAS, and current or prior GAHT, including treatment duration. GAHT administration route (eg, oral, subcutaneous, transdermal, or gel) data was not available.

Three hundred eighty-three patients were identified prior to exclusions, and 66/383 (17.2%) met study criteria. Of these 66 patients, 23 (35%) were female, 21 (32%) transgender female/male-to-female, 12 (18%) male, 6 (9%) transgender male/female-to-male, 2 (3%) other, and 2 (3%) chose not to disclose. Intended GAS included 39 (59%) vaginoplasty, 17 (26%) phalloplasty, 1 (2%) facial feminization surgery, 5 (8%) other, and 7 (11%) unreported. Of the 66 patients, 41 (62.1%) were receiving feminizing hormone therapy: 26 (63%) estradiol + spironolactone, 9 (22%) estradiol/estrogen only, 2 (5%) estradiol + leuprolide acetate, 2 (5%) ≥ 3 medications, 1 (2%) spironolactone only, 1 (2%) progesterone only. Fourteen (34%) of the 41 patients on feminizing therapy had treatment duration data, ranging from 1 month to 8 years. Of the 66 patients, 17 (25.8%) were receiving masculinizing hormone therapy: 17/17 (100%) on testosterone, with reported durations ranging from 2 to 12 years. Eight (12%) of the 66 patients had missing data for GAHT type.

This study demonstrates that the majority (88%) of TGD patients pursuing LHR at one academic health center were already receiving GAHT, although the duration varied from months to years. Therefore, this may be a unique hair removal population as hormone therapy is likely being utilized at LHR initiation. The influence of hormone therapy on LHR efficacy is unclear. Dermatologists will play a key role in understanding the effects of these therapies on this patient population in the future. Future studies should investigate the impact of GAHT on LHR.

DISCLOSURES

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AUTHOR CORRESPONDENCE

Ronda S. Farah MD
E-mail:..... rfarah@umn.edu