

Genital Tucking Practices in Transgender and Gender Diverse Patients

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ABSTRACT

Genital tucking (tucking) is the practice of hiding or minimizing the appearance of one's genitals and gonads. We aimed to better understand the prevalence of tucking and its potential effect on behavior and health. An online questionnaire was distributed to adults with a diagnosis of gender dysphoria or gender incongruence (n = 98). The risk of side effects increased with the length of tucking sessions ($P = 0.046$) with many patients avoiding medical care despite experiencing side effects. Health care providers should empathetically discuss tucking and its potential risks and benefits with transgender and gender diverse patients. Further research is needed to better quantify the potential risks involved with tucking and to assist in developing educational resources.

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INTRODUCTION

Transgender and gender diverse individuals often experience significant harassment, abuse, and discrimination which can impact their self-beliefs and lead to negative health outcomes.^{1,2} As a result, they require care from enlightened health care providers and gender-affirming health systems.³

Transgender women are assigned male at birth and experience distress (dysphoria) regarding the discordance between their female gender identity and sex assigned at birth. Gender diverse is a term inclusive of nonbinary, eunuch, and intersex individuals who experience a gender identity that is not solely male or female.¹ Transgender and gender diverse people may choose to hide or minimize the appearance of their genitals and gonads—a practice known as genital tucking (tucking). Tucking may be done with tape, underwear, or a special type of undergarment known as a gaff. This may or may not also involve pushing their gonads into the inguinal canal.⁴ Recent data suggest that tucking is correlated with reduced sperm quality.^{5,6} Prior survey data on this population suggests the risk of additional side effects but has not assessed individual perceptions regarding tucking or any associated effects on emotional health.⁷

The goal of this study was to improve our understanding of tucking, including prevalence, frequency, duration, attitudes regarding tucking, and self-perceived concern regarding potential and/or experienced side effects.

METHODS

We developed an anonymous survey, in English, using Qualtrics (Silver Lake Technology Management, LLC) software. The survey contained 27 questions in closed and open formats. Face validity was sought through review with 2 University of Virginia (UVA) committees: (1) the Gender Health Committee and (2) the Transgender Community Advisory Board.

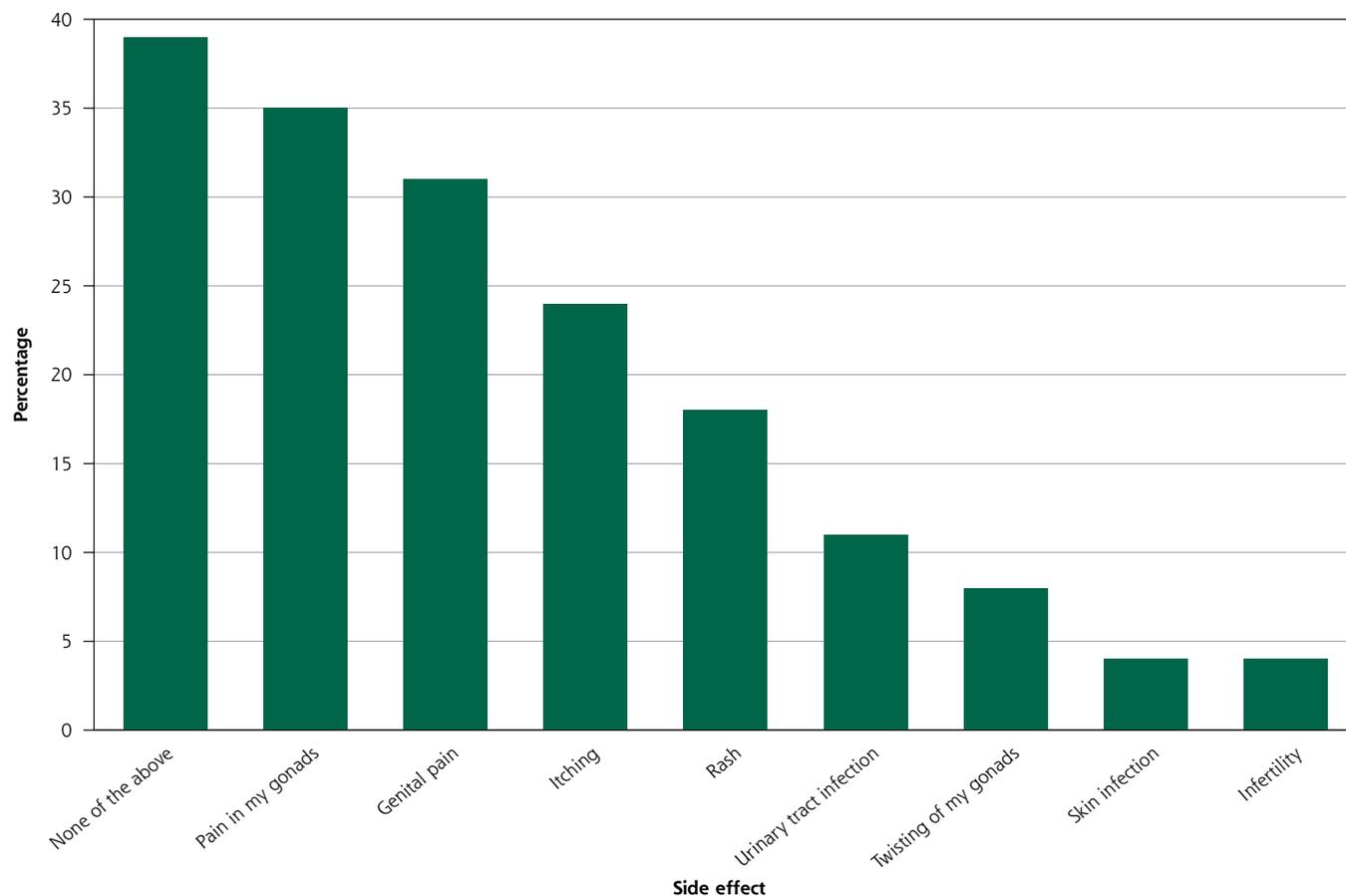
We identified potential study participants by sorting for relevant *International Classification of Diseases, 10th Revision* (ICD-10) codes (eg, "gender dysphoria") of established patients in the electronic medical record in 6 health system clinics. Exclusion criteria included individuals aged 17 years or younger and those assigned female at birth. Patients were invited to participate via an online web link through the MyChart patient portal. We provided a \$25 Amazon gift card as an incentive to the first 100 participants via optional linked contact information to protect anonymity. The survey was administered from September to November 2022. Data

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Figure 1. Patient responses to question "Have you ever personally experienced any of the following symptoms that you attribute to tucking? (Please check all that apply)."



Note: n = 79.

analyses included descriptive statistics, χ^2 test for variance in relation to the duration of tucking and reported side effects, fisher's exact test in relation to age and tucking frequency, and qualitative analysis using thematic coding with 4 independent raters. Variability in denominators is due to participants skipping questions. This study was deemed exempt by the Institutional Review Board.

RESULTS

The survey was distributed to 300 individuals with 98 responses (33% response rate). Respondents' ages ranged from 18 years to over 70 years. There was no identified association between age and either frequency or duration of tucking ($P = 0.868$).

Tucking was learned about from peers, experimentation, or Internet sources. Seventy-nine percent of respondents reported tucking, with 35% daily, 17% a couple of days per week, 13% a couple of days per month or every few months, and 14% a couple of days per year. Forty-three percent of respondents began tucking at the age of 18 years or

younger. Fifty-one percent reported tucking from 8 to 13 hours per day.

Of respondents who tucked, 52% reported taking breaks from tucking with breaks ranging from a couple of hours to months. Fifty-one respondents (65%) experienced at least 1 side effect from tucking (Figure 1), with gonad pain reported most frequently (32%). Seven respondents (10%) sought medical care for their side effects. Risk of side effects increased with cumulative daily duration of tucking $\chi^2 (5, n = 75) = 11.27; P = 0.046$.

While 70% of respondents felt they would be comfortable or very comfortable discussing tucking with their health care provider, only 23% reported having discussed tucking. A majority of participants felt that it would be helpful for clinicians to openly discuss the potential risks and benefits of tucking. Suggestions for clinicians included: asking permission, using inclusive and empathic language, explaining the reasoning behind broaching the topic, and being knowledgeable about methods and potential risks of tucking. Representative responses for each question are identified in Table 1.

DISCUSSION

Genital tucking is a common method transgender and gender diverse people use to alleviate dysphoria and feel safer. It is important to note, however, that tucking frequency and practices are individualized; some participants choose not to tuck or only tuck infrequently. The reported side effects in our population were similar to prior published survey data with predominantly mild side effects such as pain, itching, and rash.⁷ Major side effects were rarely reported.

Despite many participants experiencing side effects and some viewing any associated pain as a “necessary evil,” few had ever discussed tucking with their clinician(s). Participants cited prior traumatic medical interactions, dysphoria

regarding discussing their anatomy, and concern for a potentially invasive exam as reasons for reticence. This is exacerbated by clinicians often feeling uncomfortable about their lack of knowledge of the topic. Despite this, the majority of participants encouraged clinicians to discuss tucking with their patients in an empathetic manner. Clinicians are encouraged to ask patients if they would like to discuss risks, benefits, and safe methods of tucking and ask about preferred anatomy terminology, as the words penis and testicles may be offensive to this population. This discussion may be of particular benefit to those who tuck for 8 or more hours per day as these individuals appear to be more likely to experience side effects.

Table 1. Representative Responses to Open-Ended Survey Questions

Question/Response Theme	Representative Responses	
<p>Please identify the primary reason(s) that you tuck.</p> <p>Response themes: Alleviate dysphoria, achieve a more feminine appearance, reducing presence of visible bulge in feminine clothing, reduce discrimination, improve safety</p>	<p>“On a day-to-day basis, it’s simply for the general comfort of not having visible genitalia, as much of the clothing designed for women would appear awkward otherwise...”</p> <p>“Because the thought of having my current genitalia causes me great emotional distress often known as dysphoria. Even the presence of a bulge can cause such.”</p>	<p>“Dysphoria related to the genitals. While wearing tight clothing, the genitals can sometimes have a noticeable outline and bulge and it makes me feel extremely uncomfortable. It is also inappropriate to go out with that outline visible and can make me a target for discrimination.”</p> <p>“I never understood why I had a penis. I felt like I was a female and wanted to look like one.”</p>
<p>If you answered “Yes,” [to hearing about health side effects from tucking] what health side effects have you heard about?</p> <p>Response themes: Pain/discomfort, swelling, hernia, damage, atrophy, infertility, skin irritation, testicular torsion, itchiness, circulation issues, UTI</p>	<p>“Testicular torsion is one. As a trans person, the idea of having an issue with my testicles and having to bring that whole mess to a doctor’s office in a small town is horrifying. So I choose to only tuck if I’m doing something super formal.”</p> <p>“I can’t actually think of anything in particular, merely that it is “unsafe” to tuck for extended periods of time without rest. I can also imagine that it isn’t exactly without risk, just from my basic understanding of anatomy.”</p>	<p>“Theoretical risk of hernia after dilation of the inguinal canal, though I’ve never heard of it actually happening.”</p> <p>“Sterilization, hernia, and in extreme cases, testicular torsion. Some mild ones like irritation and itchiness too.”</p> <p>“I have received a few UTIs as my anatomy approximates my anus and meatus when I tuck. I clean thoroughly before dressing tucked, but on occasion must eliminate before the day is over...”</p>
<p>If you answered “Not particularly comfortable” or “Not at all comfortable,” [to how comfortable are you with your health care provider examining your genitals for tucking related concerns] what can your health care provider do or say to help you feel more comfortable about and/or during this exam?</p> <p>Response themes: Discuss tucking before exam, discuss preferred terminology for anatomy, quick exam if necessary, publicly support transgender individuals</p>	<p>“Keeping it quick without much manipulation. Or some discussion about reasoning beforehand.”</p> <p>“The problem is just having my genitals examined or touched. I don’t think there’s anything I can do.”</p> <p>“I would feel more comfortable if they are educated about tucking and why it is necessary for many trans people.”</p>	<p>“They are in the LGBTQ themselves and let me know about it or a history of support for the community and me in particular.”</p> <p>“A health care provider that is publicly up front about their support for trans people.”</p> <p>“Nothing. Most doctors don’t understand trans people’s needs.”</p>
<p>If you are “very concerned” or “concerned,” which health side effects are of greatest concern to you?</p> <p>Response themes: loss of circulation, nerve damage, impact on future surgical interventions</p>	<p>“Anything that could medically go wrong with the penis. I don’t want to bring up any genital pain to a doctor, I don’t want a doctor to touch it at all. I’d rather just avoid all of that.”</p>	<p>“Doing nerve damage which complicates the results of later genital reconstruction surgery, lessening feeling.”</p>

continues

LGBTQ = lesbian, gay, bisexual, and transgender, queer/questioning; SRS = sex reassignment surgery; tucking = genital tucking; UTI = urinary tract infection.

Table 1. Representative Responses to Open-Ended Survey Questions (continued)

Question/Response Theme	Representative Responses	
<p>How, if at all, does tucking affect your mood?</p> <p>Response themes: more comfortable, more confident, a necessary evil due to discomfort, more irritable, more paranoid</p>	<p>"It makes me feel more comfortable and happy with myself. I feel less dysphoric."</p> <p>"Makes me feel better about wearing women's clothing and not showing. I feel more like myself and more confident."</p> <p>"On an ordinary day, it makes me feel more comfortable in my clothes. If I'm particularly active and moving around a lot, it can sometimes feel irritating."</p> <p>"Tucking provides for a more confident feeling in appearance. (There is always concern of the tucking procedure failing at the most inconvenient time)."</p> <p>"It can help relieve gender dysphoria, but in my opinion the potential for pain makes it not worth it. I have also started to feel more comfortable with my genitals, so I no longer feel the need to tuck."</p> <p>"When I was very early on in my transition it made me feel better to think less about how my genitals were there. There are other things that make me feel good so I don't feel as reliant on tucking to feel good."</p>	<p>"Improves it, but only temporarily. It isn't permanent and often the added pressure to the area makes me more aware of "it" which is the opposite of what I want."</p> <p>"Tucking, itself, doesn't affect my mood so much as not tucking causes me to feel anxious and mildly paranoid about others' possible attention."</p> <p>"It was a necessary evil. I did not want the parts to be there; tucking helped them appear not to be."</p> <p>"It makes me feel irritable, anxious, hypervigilant."</p> <p>"It makes me sad that I have to touch it on a day-to-day basis... and I'm mad at my higher power for putting me on this planet in the wrong body to be harassed and attacked on a regular basis..."</p> <p>"Despite the pain and fear, when I tuck right, it is one of the best things ever. I look down and feel better about myself. Sometimes, the pain is worth it."</p>
<p>In order to help health care providers deliver the best possible care to transgender, non-binary, and gender non-conforming patients, what advice would you give health care providers when addressing the practice of tucking and the genital exam with a patient?</p> <p>Response themes: Do not shame patients who tuck, discuss risks of tucking, provide resources for safe tucking practices, be compassionate/affirming, ask for preferred terms for patient anatomy, concern over whether tucking is genuinely a medical concern</p>	<p>"... It is not a subject I am comfortable bringing up on my own, so to the best of my recollection I never discussed with my provider. That said, I would have welcomed advice on the topic pre-orchietomy."</p> <p>"Use compassion to make sure that the patients have a method to deal with dysphoria during the exam and have a safe method to use in their day-to-day lives. Ask them what vocabulary they would like to use for their genitals."</p> <p>"Begin by asking first if it would be alright if you were to talk to a patient about it, and then asking if they would like resources on tucking, as well as explaining potential risks of tucking, finishing by informing the patient that if they were to tuck, it would be prudent to check for potential issues or complications, and that you would be capable of doing that AND that you could explain to them how to do it themselves."</p> <p>"Providing literature with proper techniques to safely tuck and avoid any long-term issues. Understanding the effects tucking can have on future SRS procedures."</p> <p>"... Whether a patient is tucking or not is not a concern of an endocrinologist or a medical physician. Unless it is obviously causing a medical issue. I believe, for some of us (myself included) it is so very important to tuck, that suffering from pain or minor medical issues is inconsequential... Compassion, empathy, kindness, understanding and an open mind are all traits that are greatly appreciated in this field obviously."</p> <p>"Be clear on the risks and likelihood of those risks with patients."</p>	<p>"It is a highly individualized practice... While it's hard to offer advice for something with such little data, I think it's important to emphasize it should not hurt, and that a patient should respond to pain by un-tucking and contacting their doctor. I imagine it's similar to binding in that regard."</p> <p>"Anything whose negative effects are practical and whose positive effects are mental/social. I think some health care providers don't form habits around exercising empathy when it comes to these things."</p> <p>"Have an empathetic ear when we talk about why we tuck and be respectful of the reasons why we do this."</p> <p>"That eliminating male genitalia is not the goal of every transwoman and thus a genuine preference not to tuck is possible."</p> <p>"I'm not quite sure. My resolution of "reclaiming my penis" is not something that I can recommend to others. Everyone's dysphoria is different. I think the best thing to do is communicate the risks of tucking and help monitor them in patients."</p> <p>"My health care providers asked if I tucked and where I learned it and we had a great discussion on it. I think it was just the way they started the conversation, with understanding."</p> <p>"For many of us, the effects it has on our dysphoria greatly outweighs the health issues associated to it. For most trans females it's just a way of life."</p> <p>"First, I would have them provide multiple ways of offering assistance/knowledge about tucking. They could offer to explain it, have literature, or some handy links for the patient..."</p>

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Clinicians should assess motivations and ambivalence regarding tucking as well as discuss potential risks including impaired fertility, pain, itching, rash, and less likely but potentially more severe risks such as testicular torsion and infection. Impaired fertility appears to be reversible though there is insufficient evidence about reversibility of other side-effects.⁵ Respondents called for more health care—provided educational materials such as printouts or media to help guide safe practice; however, the paucity of published data makes creating evidence-based materials challenging.

Study limitations include limited sample size and generalizability. Respondents were recruited from 1 health care system and its catchment area. This study is at risk for non-response bias which may favor responses toward those who tuck more frequently or who experience more frequent or severe side effects. No demographic data other than age were collected to enhance anonymity. Further research is needed to identify the safety profile of tucking in order to help guide effective, evidence-based education for patients and clinicians. Additionally, future research is recommended to assess the effect of hormone treatment and gender-affirming surgery on individuals who tuck.



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Key words: gender affirming health care; genital tucking; gender incongruence; gender dysphoria; transgender; gender diverse individuals

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