



Research Week 2020

Impact of Testosterone Therapy on Respiratory Support for Voice in Transgender and Gender Diverse Individuals

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Abstract

Background

Testosterone therapy is considered standard of care medical treatment for transgender and gender diverse individuals assigned female at birth. The impact of gender affirming testosterone therapy on respiratory muscle strength has not yet been studied, nor have respiratory norms for transgender and gender diverse individuals undergoing this therapy been established. In considering voice for this population, establishing respiratory norms would aid the accuracy of pulmonary function testing for individuals who have undergone testosterone therapy and provide data to the limited pool of evidence on the vocal effects of testosterone therapy.

Purpose

The purpose of this pilot study was to explore the effect of testosterone therapy as part of medical treatment to align gender identity, on respiration and voice production, highlighting the need for larger studies to establish norms and better inform patients on possible respiratory changes post-treatment.

Methods

The primary outcomes of interest were respiratory volume and strength, reflected by measures of forced vital capacity (FVC), maximum inspiratory pressure (MIP), and maximum expiratory pressure (MEP). Because established respiratory norms are adjusted for biological sex, we compared participant data to published cisgender female and male norms. Twenty-four non-smoking transgender and gender diverse individuals, assigned female at birth participated in this study. Participants were aged 18-65 and on testosterone therapy consistently for at least the past year.

Results/Conclusion

We hypothesized that FVC, MIP and MEP may be increased by testosterone, closer aligning to cisgender male norms as compared to cisgender female norms. Results and conclusions will be presented.

