Multicenter Transgender and Gender Diverse Multiple Sclerosis Database

Authors: Alexandra Balshi, Talia Feldman, John Dempsey, Meagan Harms, Paige Greenawalt, Joshua Katz, Sarah Conway, Christopher Severson, Maria Houtchens, Tamara Kaplan, Tanuja Chitnis, Riley Bove* and Jacob Sloane*

*contributed equally

Abstract

Background

Biological sex influences the risk and severity of MS, with individuals assigned female at birth (AFAB) having higher MS prevalence, earlier disease onset, but less disability progression than those assigned male at birth (AMAB). Sex hormones contribute to sex-differences in MS disease course, yet research on how gender identity and gender-affirming hormone therapy (GAHT) may influence MS course is currently lacking.

Objectives

To characterize a cohort of transgender and gender diverse persons with MS, assess the effect of GAHT on MS activity and outcomes, and establish a database to enable further research in transgender persons with MS (PwMS).

Methods

Across the Beth Israel, Brigham and Women's, Eliot Lewis, and UCSF MS Centers, we identified transgender and gender diverse persons with MS and recorded their relevant demographic, gender identity, and clinical information. Specifically, we documented GAHT use, EDSS scores, and 25-foot walk (25FW) times.

Results

We included 20 PwMS in this study: 9 transgender men, 1 transgender woman, and 10 non-binary individuals. Thirteen had current or historical GAHT use, and 8 had gender-affirming surgery. Average recent EDSS score was 1.9 and average recent 25FW time was 4.7 seconds. In three patients who began GAHT after MS diagnosis, EDSS scores did not increase after GAHT. Overall, 45% of our cohort was not asked about their sexual health, 20% were not prescribed non-DMT symptomatic relief, 70% had a history of depression, and 80% had a history of anxiety.

Conclusions

GAHT initiation was not associated with any EDSS increase in our cohort. Clinicians should be diligent about inquiring about mental and sexual health in this population.