

Identifying Spasticity Treatment Gaps in Long-term Care and Community Settings from Ontario Real-world Evidence

Description

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ABSTRACT

Objectives: Post-stroke spasticity (PSS) is a debilitating condition that may be undertreated in patients in long-term care (LTC) facilities. This study evaluated gaps in care for PSS in LTC and community settings in Ontario, Canada. **Design:** Retrospective, observational, real-world study. **Setting and Participants:** Patients in Canadian LTC and community settings with ≥1 claim for any botulinum toxin A (BoNT/A) treatment for focal spasticity between 1/1/2010 and 12/31/2019 were included. **Methods:** Data from the longitudinal IQVIA Ontario Drug Benefit (ODB) claims database were used. Patients were stratified into LTC and community cohorts. Outcomes included total patients treated and total claims per year, treatment rate, mean number of injections per patient per year (two-sided Wilcoxon rank sum test), and time to treatment. **Results:** Over 10 years, the numbers of patients treated with BoNT/A (2010: n=522; 2019: n=4056), BoNT/A claims for PSS (2010: n=997; 2019: n=12,579), and proportions of claims from LTC residents (2010: 46%; 2019: 52%) increased. The estimated rate of BoNT/A treatment in LTC patients with PSS increased from 33.1% (2015) to 62.5% in 2019, leaving 37.5% of eligible LTC residents untreated. Mean number of injections per patient per year increased from 1.9 in 2010 to ~3.0 in 2017 to 2019 in both LTC and community cohorts. After LTC admission, median time to first physical medicine and rehabilitation physician or neurologist claim was 2.8 years and time to first BoNT/A injection was 2.9 years. **Conclusions and Implications:** This claims database analysis of patients treated for post-stroke focal spasticity in Ontario revealed a large, undertreated population not receiving BoNT/A therapy and a long time lag between LTC admission and treatment with BoNT/A. These findings highlight the need to increase access to PSS treatment to help reduce patient and caregiver burden.

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Conflicts of Interest: Omar Khan has received honoraria for participation in advisory boards and provision of education and training pertaining to neurotoxin use in spasticity and focal dystonia. He has received sample Botulinum Toxin A from AbbVie, Ipsen, and Merz for clinical patient management. Cathy Vo is an employee of AbbVie and may hold AbbVie stock. Riccardo Pedersini is a health economics consultant for AbbVie. Galit Kleiner, in partnership with Baycrest Health Sciences, owns a use patent for the indication of Botulinum Toxin for paratonia. She has received payments for patent maintenance fees from AbbVie (February 2021, April 2022) while considering licensing of patent (declined). No current relationship. She has received consulting fees and honoraria from AbbVie and Ipsen. She has received sample Botulinum Toxin A from AbbVie, Ipsen, and Merz. Huijuan Yang, Shoghag Khoudigian-Sinani, and Bradley Millson are employees of IQVIA Canada. IQVIA was paid by AbbVie to conduct this research.

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