

**Conclusions:** VEVA as a supplement to clinical evaluation appears to facilitate muscle identification and selection for treatment of ankle deformities with BoNT-A with marked improvement in ankle MAS and TS as pharmacological activity indicators and increase in SSWV as a functional marker.

**Funding:** This study was supported by a researcher-initiated grant from Ipsen.

**Keywords:** Stroke; Traumatic brain injury; Gait spatio-temporal data; Video-enhanced visual analysis; AbobotulinumtoxinA

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## ADHERENCE TO ONABOTULINUMTOXIN A TREATMENT IN PATIENTS WITH SPASTICITY FROM THE ASPIRE STUDY

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**Introduction and Objectives:** To better understand clinical strategies to manage spasticity, we aimed to identify baseline clinical characteristics and treatment-related variables that impact adherence to onabotulinumtoxinA treatment in patients from the Adult Spasticity International Registry (ASPIRE) study.

**Methods:** International, prospective, observational registry (NCT01930786). Adults with spasticity were treated with onabotulinumtoxinA at the clinician's discretion. Clinically meaningful thresholds for treatment adherence ( $\geq 3$  treatment sessions in 2-year study) and non-adherence ( $\leq 2$  sessions) were used. Data were analyzed using univariate and multivariate logistic regression and presented as odds ratios (OR) with 95% confidence intervals (CI). Statistical significance was accepted at  $P < 0.05$ ; clinically meaningful non-significant variables of interest at  $P < 0.10$ . Data for treatment-related variables were assessed at sessions 1 and 2 only.

**Results:** Of the total population (N=730), 523 patients (71.6%) were treatment adherent with 5.3 (1.6; mean [SD]) treatment sessions; 207 (28.4%) were non-adherent with 1.5 (0.5) treatment sessions. In the final model (n=626/730), 522 patients (83.4%) were treatment adherent, 104 (16.6%) were non-adherent. Baseline characteristics associated with adherence: treated in Europe (OR: 1.84; CI: 1.06-3.21;  $P=0.030$ ) and use of orthotics (OR: 1.88; CI: 1.15-3.08;  $P=0.012$ ). Baseline characteristics associated with non-adherence: history of diplopia (OR: 0.28; CI: 0.09-0.89;  $P=0.031$ ) and use of assistive devices (OR: 0.51; CI: 0.29-0.90;  $P=0.021$ ). Treatment-related variables associated with non-adherence: treatment interval  $\geq 15$  weeks (session 1 to 2; OR: 0.43; CI: 0.26-0.72;  $P=0.001$ ) and clinician dissatisfaction with onabotulinumtoxinA to manage pain (OR: 0.18; CI: 0.05-0.69;  $P=0.012$ ).

**Conclusions:** These ASPIRE analyses provide real-world insight into variables that impact adherence to onabotulinumtoxinA treatment, which can help optimize spasticity management strategies to improve patient care.

**Funding:** Allergan, prior to acquisition by AbbVie

**Keywords:** Botulinum toxin; OnabotulinumtoxinA; Patient compliance;

Spasticity; Treatment adherence

## MANAGEMENT OF SYMPTOM RE-EMERGENCE IN PATIENTS LIVING WITH SPASTICITY AND CERVICAL DYSTONIA: FINDINGS FROM 2 ONLINE PATIENT SURVEYS

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**Introduction:** Botulinum toxin type A (BoNT-A) injections are first-line treatment for spasticity and cervical dystonia (CD). Current guidelines suggest that BoNT-A injections should not be given more frequently than every 12 weeks but waning of benefit may occur at a shorter interval allowing for re-emergence of symptoms.

**Design:** Separate, but parallel, online surveys were developed for adult spasticity and CD including questions assessing current management of symptom re-emergence, and patient expectations for optimal treatment. Both surveys were deployed in France, Germany, Italy, the United Kingdom, and the United States.

**Results:** A total of 210 respondents with spasticity and 209 with CD completed the online surveys. Following a report of symptom re-emergence, the most common management approaches for patients living with spasticity or CD respectively were to add adjunctive treatments (36% spasticity; 35% CD), increase the BoNT-A dose (28% spasticity; 54% CD), wait for the next injection (27% spasticity; 19% CD) or a reduction in treatment interval (26% spasticity; 23% CD). Of the respondents, 8% with spasticity and 14% with CD said they do not tell their doctor about symptom re-emergence with the most common reason being they "do not believe they can do anything about it." While respondents (both conditions) were generally happy with their current injection schedules, 72% of respondents with spasticity and 71% of those with CD suffering symptom re-emergence said they would like a longer-lasting BoNT-A treatment.

**Conclusions:** Symptom re-emergence between BoNT-A injections in both spasticity and CD is common. Greater patient—and physician—awareness of this therapeutic profile should lead to better informed therapeutic discussions, planning, and outcomes.

**Keywords:** Botulinum toxin; Cervical dystonia; Patient survey; Spasticity; Symptom re-emergence

## PATIENT EXPERIENCES OF SYMPTOM RE-EMERGENCE: FINDINGS FROM 2 ONLINE PATIENT SURVEYS IN SPASTICITY AND CERVICAL DYSTONIA

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**Introduction:** Botulinum neurotoxin type A (BoNT-A) is a major, effective pharmacological treatment for the management of spasticity and cervical dystonia (CD) that requires repeated administration at variable intervals. Patient perceptions of treatment efficacy and waning of BoNT-A effect over