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 ONABOTULINUMTOXINA 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

a treatment cycle have not been well studied.
Design: Separate, but parallel, online surveys were developed for adult spasticity and CD to assess patient perceptions of the waning of BoNT-A effect before the next planned injection and its impact on daily life. Both surveys were deployed in France, Germany, Italy, UK, and USA.
Results: A total of 210 respondents with spasticity and 209 with CD completed the online surveys. Symptom re-emergence between BoNT-A injections was common in both indications (affecting 83% respondents with spasticity and 88% with CD). A majority of patients, both with spasticity and CD, experienced recurrence within 3 months of their injection; the average time from injection to symptom re-emergence was 89.4 days in spasticity and 73.6 days in CD. Treatment was not reported to completely abolish symptoms of either condition, even at peak effect. However, symptom intensity was consistently rated as lowest at the peak of treatment effects, increasing as the effects of treatment start waning and was strongest one day before the next session [Figure]. Most patients (both conditions) reported having BoNT-A injections at 3-4 monthly intervals, which means that many patients spend at least a few weeks with re-emergent symptoms between treatments.
Conclusions: Results will raise awareness as to how the waning of BoNT-A effect can impact daily life to inform future treatment decisions to address patients' needs.
Keywords: Botulinum toxin; Cervical dystonia; Patient survey; Spasticity; Symptom re-emergence

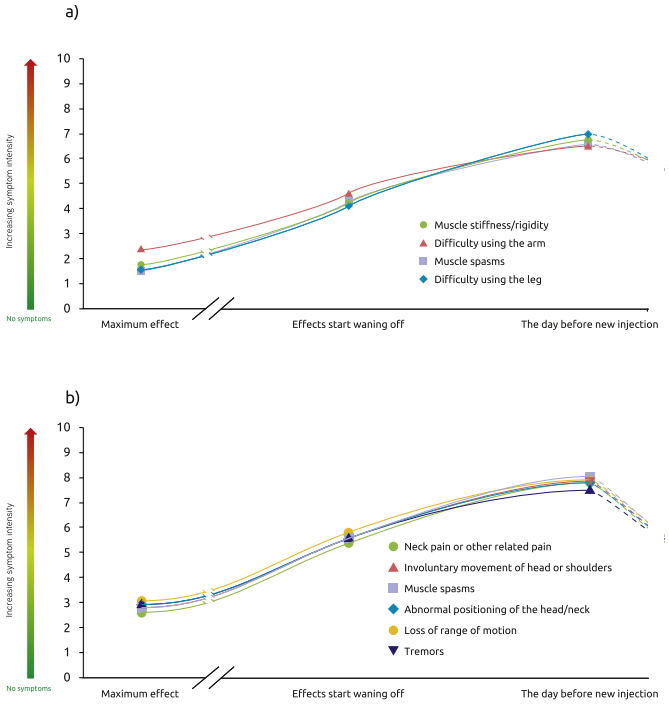

Fig. Symptom intensity across a BoNT-A injection cycle (a) for patients living with spasticity (b) for patients living with CD.

REDUCTION IN INCONTINENCE PRODUCT USE AND ASSOCIATED COST SAVINGS AFTER ONABOTULINUMTOXINA TREATMENT IN PATIENTS WITH OVERACTIVE BLADDER

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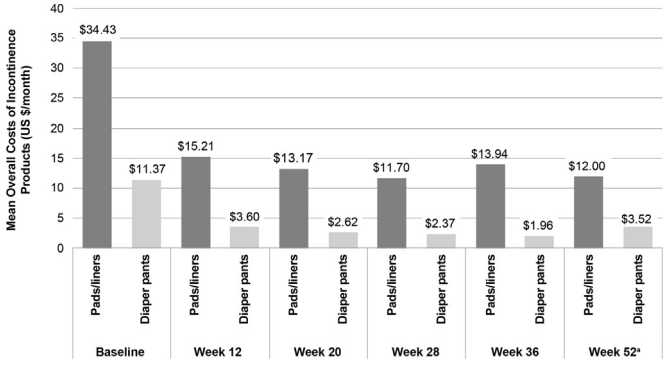
Background: In patients with overactive bladder (OAB), onabotulinumtoxinA 100 U reduces urinary incontinence (UI) and improves quality of life. This analysis aimed to estimate potential cost savings in a real-world clinical setting seen after onabotulinumtoxinA treatment due to a reduced reliance on incontinence products.
Methods: This 12-month prospective, observational, non-randomized multinational phase 4 study was performed in 4 European countries. Outcomes: percent reduction from baseline (BL) in UI episodes/day, proportion of patients achieving ≥50%/100% reduction in UI episodes/day, treatment benefit score (TBS), and number of incontinence products used per month. Incontinence product costs (pads/liners and diaper pants) were estimated using available pricing data filtered by average female waist size (diaper pants) and largest package size.
Results: Overall, 504 patients received onabotulinumtoxinA. Daily UI episodes at BL were (mean ± standard deviation [SD]) 4.9 ± 4.2. UI episodes were significantly reduced by 46.9% ($P < .001$) at week 1 and 61.3% at week 12 ($P<.001$). The proportion of patients achieving a ≥50% and 100% reduction in UI episodes/day was 60.7% and 25.5% at week 1 and 73.9% and 41.8% at week 12. A positive treatment response on the TBS was seen in 87.6% of patients. The mean monthly number of pads/liners and diaper pants used dropped from BL (67.7 and 13.9) to week 12 (29.9 and 4.4) and was sustained until week 52 (23.6 and 4.3). Mean cost for pads/liners was determined to be $0.51/unit and for diaper pants $0.82/unit. Monthly costs of pads/liners and diaper pants decreased substantially from BL to week 12 and was sustained to week 52 (Figure 1).
Conclusions: This analysis is the first of its kind detailing potential cost savings in incontinence product use in OAB patients treated with onabotulinumtoxinA. There was greater than 50% reduction in monthly costs of pads/liners and nearly 70% reduction in diaper pants costs sustained out to 52 weeks.
Funding: Allergan, an AbbVie company
Keywords: Cost analysis; OnabotulinumtoxinA; Urinary incontinence

Figure 1: Estimated monthly cost of incontinence products.



[a]Week 52: only patients without reinjection of onabotulinumtoxinA.

DEVELOPMENT OF A NEW SIALORRHEA TREATMENT SERVICE FOR PATIENTS WITH NEUROLOGICAL DISORDERS WITHIN A COMMUNITY AND DISTRICT HOSPITAL SETTING

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Introduction: A new service was created to provide specialist investigation and treatment of resistant hypersalivation in neurological disorders through the provision of ultrasound-guided botulinum toxin type A (BTX-