Keywords: Botulinum toxin; Patient-related outcomes

Background.– Spasticity is a disabling consequence of stroke and traumatic brain injury and contributes to other conditions, such as pain, impairment in daily activities and gait. OnabotulinumtoxinA has been shown to reduce muscle tone in patients with lower limb spasticity (LLS). We sought to assess whether reducing muscle tone is associated with clinically meaningful improvements in patient-related outcomes.

Methods.– Data from 3 published placebo-controlled LLS trials (AGN/HO/SPA/001-191622 (BOTOX Economic Spasticity Trial [BEST]), BTOX-702-8051, BTX108512) using onabotulinumtoxinA and the Patient Registry Outcomes in Spasticity (PROS) World registry were indirectly compared for patient-related outcomes.

Results.– A total of 509 patients were identified with LLS involving the ankle. The patient clinical global impression scale was significantly correlated with modified Ashworth scale scores in BTX108512. Eighty percent of patients in PROS were satisfied with their injections. BEST was significant for the proportion of patients reporting 50% reduction in pain. Significant improvements in spasms, cramps, and patient-rated injection benefit were demonstrated in BTOX-702-8051 with strong trends in gait speed. Functional goal attainment was significant in BEST with improvements in PROS.

Conclusions.– Reductions in muscle tone after onabotulinumtoxinA treatment are beneficial to patients as demonstrated by improvement in patient-related outcomes.

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Keywords: Spasticity; Patient reported outcome; Clinician reported outcome

Background.– An illustrative picture guide to identify common postures of upper and lower limb spasticity was developed for use by clinicians and patients.

Methods.– Five specialists in spasticity management provided guidance on the most common postures observed in patients with spasticity. A photo shoot with patients was held to capture photos of these spasticity postures across four etiologies (stroke, traumatic brain injury, multiple sclerosis, and cerebral palsy). Initially, clinicians separately ranked the most representative photo for each posture. Subsequently, the group reached a consensus on the best photo for each posture. A medical illustrator converted the posture photos into representative sketches for inclusion into the picture tool.

Results.– Fifteen patients with spasticity representing each etiology participated in the photo shoot. All postures were photographed from various angles, resulting in at least five unique photos per posture. Fifteen common postures were identified and converted into representative sketches.

Conclusions.– The spasticity common postures guide will be a useful tool for determining the prevalence of spasticity postures and gaining a better understanding of the treatment goals of spasticity presentations. Additionally, the guide may reduce the heterogeneity of spasticity evaluation among clinicians. Patients’ understanding of the guide will be evaluated in future interviews.

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Keywords: Botulinum toxin; Stroke; Cross sectional survey; Patient satisfaction

Background.– Botulinum toxin (BoNT) injections are first-line treatment for post-stroke spasticity (PSS). However, some patients may experience re-emergence of symptoms before re-injection with a standard 12-weekly injection regimen.

Methods.– Structured patient and physician surveys in Canada, France, Germany, and USA. Patients had received ≥ 2 BoNT-A treatments for PSS. Physicians had ≥ 3 years’ experience injecting BoNT for PSS. Information regarding treatment satisfaction was collected from both groups.

Results.– Sixty-one of 79 patients (77%) received onabotulinumtoxinA, 15/79 (19%) abobotulinumtoxinA and 3/79 (4%) incobotulinumtoxinA. Most patients were very (40.5%) or somewhat (48.1%) satisfied with BoNT treatment. Satisfaction was highest at time of peak effect and lowest before re-injection. Injection intervals ≤ 12 or ≤ 10 weeks were preferred by 78.9% or 43.4% of patients, and received by 45.6% or 6.3%, respectively. Mean (standard deviation) injection interval received was 13.7 (3.5) weeks. Physicians (n = 105) were moderately (57.7%) or very (36.5%) satisfied with treatment, but felt that 16.2% or 24.6% of patients would benefit from shorter intervals or higher doses, respectively.

Conclusions.– Patient and physician satisfaction with BoNT treatment for PSS is high, although patient preference is for shorter injection intervals. Physicians believe shorter intervals and higher doses may confer additional benefit in some patients.

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