Effect of onabotulinumtoxinA on patient-related outcomes for lower limb spasticity


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.

Keywords: Botulinum toxin; Patient-related outcomes

Satisfaction with botulinum toxin treatment in post-stroke spasticity: Results from two cross-sectional surveys of patients and physicians

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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 the United States were conducted over 3 years. Physicians received onabotulinumtoxinA, 15/79 (19%) abobotulinumtoxinA and 3/79 (4%) incobotulinumtoxinA. Most patients were very (40.5%) or somewhat satisfied (48.1%) 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% 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%