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Title

Poster 296 AbobotulinumtoxinA Injection Patterns in Patients with Cervical Dystonia from the ANCHOR-CD Registry Study

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Setting: Outpatient Physical Medicine and Rehabilitation Clinic

Results or Clinical Course: EMG testing was consistent with denervation of both the trapezius and rhomboids on the right side. Normal paraspinal and serratus anterior electrodiagnostics ruled out other potential causes of lateral scapular winging such as C5-6 radiculopathy and upper trunk plexopathy. The electrodiagnostic studies indicated peripheral damage to both the dorsal scapular and spinal accessory nerves.

Discussion: Lateral scapular winging is a rare condition that can result in severe pain and functional limitations. Lateral scapular winging is most commonly attributed to iatrogenic damage to the spinal accessory nerve. A search of the literature did not reveal any cases of lateral scapular winging secondary to peripheral nerve injury involving both the trapezius (spinal accessory nerve) and rhomboids (dorsal scapular nerve). The patient's physical examination, mechanism of injury, and electrodiagnostic findings highlight the close anatomic relationship between these 2 nerves and their potential for damage in cases of penetrating neck trauma.

Conclusions: In cases of neck trauma with persistent shoulder pain, scapular winging due to peripheral nerve damage must be considered. The possibility of multiple peripheral nerve lesions should be carefully assessed when selecting muscles to sample on EMG for lateral scapular winging.

Poster 26

Cervical Dystonia Patient Registry for Observation of OnabotulinumtoxinA Efficacy (CD PROBE): Baseline Demographic and Clinical Characteristics.

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Disclosures: D. Charles, Consulting fees or other remuneration (payment): Allergan, Ipsen, Medtronic, Merz; Research grants: Allergan, Ipsen, Medtronic, Merz

Objective: To describe the baseline demographic and clinical characteristics of patients with cervical dystonia (CD) enrolled in CD PROBE.

Design: CD PROBE is a prospective, open-label, multi-center, observational, longitudinal registry evaluating the treatment of CD with onabotulinumtoxinA (BOTOX®) (NCT00836017).

Setting: Neurology, pain, and rehabilitation clinics.

Participants: Subjects were new to the physician's practice, ≥ 16 weeks since any treatment with botulinum toxin, or toxin naïve.

Interventions: Subjects were treated with onabotulinumtoxinA.

Main Outcome Measures: Baseline variables and physician clinical assessment of disease severity were analyzed.

Results or Clinical Course: As of 2/26/13, 1046 subjects, mean age 58.0 ± 14.7 years, 74.3% female, were enrolled in CD PROBE. The mean age at symptom onset was 49.0 ± 16.7 years, time from CD onset to diagnosis was 5.0 ± 8.1 years, and time from CD diagnosis to first treatment was 1.1 ± 4.5 years. The majority (63.5%) were toxin naïve at baseline. At enrollment, 11.8% considered themselves "disabled." Torticollis was the most common CD subtype (47.5%), followed by laterocollis (38.9%), anterocollis (5.7%), retrocollis (5.3%), and other abnormal postures (2.6%). The mean Toronto Western Spasmodic Torticollis Rating Scale (TWSTRS) score was 38.8 ± 13.1 (Severity subscale: 17.3 ± 5.3 , Disability subscale: 11.1 ± 6.4 , Pain

subscale: 10.4 ± 5.1). Mean Cervical Dystonia Impact Profile (CDIP-58) subscale scores at baseline ranged between 44.8 ± 24.6 (Walking) to 70.7 ± 22.8 (Pain and Discomfort). The various pain measures, including TWSTRS Pain subscale, CDIP-58 Pain subscale, and Pain Numeric Rating Scale, were all significantly inter-correlated ($p \leq .0001$).

Conclusions: CD PROBE will continue to provide important clinical information from the largest CD cohort followed prospectively after treatment with onabotulinumtoxinA. The baseline data provide evidence for 3:1 female preponderance, 50 years mean age at onset, high frequency of pain and disability, and >6 years latency from onset of symptoms to treatment.

Poster 27

ANCHOR-CD (AbobotulinumtoxinA Neurotoxin: Clinical and Health Economics Outcomes Registry in Cervical Dystonia): An Economic Evaluation of the Reimbursement Cost of Dysport® Treatment for Non-Naïve Patients.

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Disclosures: D. Marchese, Employment (full or part-time), Ipsen Biopharmaceuticals, Inc.

Objective: Assess and compare chemodenervation reimbursement drug cost for cervical dystonia (CD) patients enrolled into ANCHOR-CD who have switched from onabotulinumtoxinA (Botox®) to abobotulinumtoxinA, and treated for up to 4 treatment cycles.

Design: Open-label observational study.

Setting: 33 U.S. clinical sites.

Participants: Target enrollment of 400 idiopathic CD patients treated with abobotulinumtoxinA

Interventions: None

Main Outcome Measures: Average Sales Price (ASP) per median dose. ASP is calculated from quarterly drug pricing data submitted by manufacturers and is the Medicare payment plus 6% for billed drugs.

Results or Clinical Course: Anchor CD is a prospective, open-label registry of clinical and economic outcomes of abobotulinumtoxinA treatment in CD. As of July 26, 2012, 102 patients previously treated with onabotulinumtoxinA have enrolled. Analysis was based upon the January 2013 ASP Drug Pricing for onabotulinumtoxinA (Health Care Common Procedure Coding System, HCPCS J0585) of \$5.470/1 Unit and abobotulinumtoxinA (HCPCS J0586) of \$6.898/5 Units. Calculations were based upon median abobotulinumtoxinA and onabotulinumtoxinA doses injected and do not account for unavoidable wastage. Other reimbursement costs associated with chemodenervation and supplies are assumed to be identical. For this cohort, the median dose of onabotulinumtoxinA was 250 Units. Applying the ASP of onabotulinumtoxinA results in an averaged group cost of \$1367.50 per treatment. The median dose of abobotulinumtoxinA at baseline for the 102 non-naïve patients was 500 U, cycle 2 (n=68) was 500 U, cycle 3 (n=42) was 500 U, and cycle 4 (n=30) was 500 U. Applying the ASP of abobotulinumtoxinA for each of these cycles results in an averaged group cost of \$689.80 per treatment at each cycle.

Conclusions: This analysis suggests that switching to abobotulinumtoxinA (Dysport®) may markedly reduce drug costs associated with chemodenervation for CD when compared to onabotulinumtoxinA (Botox®).

Poster 29

ANCHOR-CD (AbobotulinumtoxinA Neurotoxin: Clinical and Health Economics Outcomes Registry in Cervical Dystonia): A Multicenter, Observational Study of Dysport® (AbobotulinumtoxinA) in Cervical Dystonia: Baseline Data and Cycle One Efficacy Data.

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Disclosures: E. L. Polukhin, No Disclosures: I Have Nothing To Disclose.

Objective: To determine efficacy and patient outcomes in cervical dystonia (CD) patients treated with Dysport®, abobotulinumtoxinA, in routine clinical practice.

Design: Open-label observational study.

Setting: 33 U.S. clinical sites.

Participants: Target enrollment of 400 idiopathic CD patients treated with abobotulinumtoxinA.

Interventions: None

Main Outcome Measures: Toronto Western Spasmodic Torticollis Rating Scale (TWSTRS), Pain Numeric Rating Scale (NRS), Clinical Global Impression of Change (CGIC), Patient Global Impression of Change (PGIC), and Modified Treatment Satisfaction Questionnaire for Medication (TSQM).

Results or Clinical Course: Data from an ongoing study of CD patients was collected on July 26, 2012 from 209 patients. The types of dystonic posturing included torticollis (85.4%), laterocollis (54.9%), retrocollis (24.3%), and anterocollis (15.5%). 156 (75%) patients were previously treated with botulinum toxin therapy: 102/156 (66%) were switched from onabotulinumtoxinA (Botox®), and 32/156 (21%) patients continued on abobotulinumtoxinA. The median dose of abobotulinumtoxinA in cycle one was 500 Units. The most frequently injected muscles were the splenius capitis, trapezius, levator scapulae, sternocleidomastoid, and semispinalis capitis. Mean (SD) TWSTRS total score was 41.2 (18.3) at baseline and 28.1 (16.3) at 4-week follow-up demonstrating a -12.5 (9.9) mean change or 32.1% improvement compared to baseline. Mean (SD) Pain NRS score (0-10) was 4.8 (3.1) at baseline and 3.5 (2.8) at 4-week follow-up demonstrating a -1.24 (2.6) mean change from baseline. 63.5% of physicians and 42.4% of patients rated much improved and very much improved for the CGIC and PGIC, respectively. Modified TSQM scores indicated that 83% of patients were satisfied with abobotulinumtoxinA treatment. 3 (1.4%) patients withdrew from the study due to adverse drug reactions.

Conclusions: Improvements in the severity, disability, and pain symptoms were reported in CD patients treated with abobotulinumtoxinA during cycle 1 along with treatment satisfaction. Ongoing analyses will seek to ascertain factors associated with response and with perceived magnitude of benefits.

Poster 30

Predicting Recovery to Independent Physical Functioning after Rehabilitation for Stroke within the Acute Hospitalization.

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Disclosures: M. G. Stineman, No Disclosures: I Have Nothing To Disclose.

Objective: Develop a score for predicting recovery of independent physical function through rehabilitation administered during acute hospitalization for new stroke.

Design: Observational study applying cross-validated multivariable logistic regression. Points derived from the β -coefficients yielded scores indicating the probability of recovery by adding up the points.

Setting: Rehabilitation services within 110 Veteran Affairs Medical Centers.

Participants: All 5,316 patients (60% in the derivation cohort and 40% in the validation cohort) receiving either consultative or comprehensive rehabilitation while hospitalized and rated as physically dependent at initial assessment.

Interventions: Not applicable.

Main Outcome Measures: Recovery to grade VI or above at final assessment is the point when patients no longer need physical assistance with eating, grooming, dressing upper and lower body, toileting, sphincter management, bed to chairs, toilet, and tub transfers, walking/wheelchair use, and require no more than supervision bathing or climbing stairs.

Results or Clinical Course: Only 16% of patients reached grade VI. There were 6 independent predictors with the following points: age (≤ 79 years=1, > 79 years=0), time from initial to final grade assessment (1-2 days=0, ≥ 3 days=1), lack of renal/genitourinary procedures=2, admission grade (I or II=0; III=1; IV or V=3), admission cognitive stage (I or II=0; III=1; IV, V, or VI=2; VII=3), and type of rehabilitation (consultative=0; comprehensive=2). The proportions of patients recovered to grade VI for the 1st (score ≤ 5), 2nd (score=5-6), 3rd (score=7-8), and 4th (score > 8) score quartiles were 0.54%, 5.95%, 19.61%, and 36.73%, respectively. Area under the receiver operating curve was 0.83 and 0.82 for the point system in the derivation and validation cohorts, respectively.

Conclusions: Clinicians can forecast functional recovery to grade VI based on stroke patients' initial status and type of rehabilitation services received by summing points and thus producing a simple score. This high benchmark marks a target for discharge home with nearly complete autonomy.

Poster 31

Central Adiposity Is an Independent Risk Factor for Low Vitamin D Among Adults With Cerebral Palsy.

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Disclosures: E. A. Hurvitz, No Disclosures: I Have Nothing To Disclose.