

Health) was conducted. SourceLX contains linked prescription and diagnosis claims for \$35 million patients with insurance coverage from a variety of sources. Data were screened to identify records between December 1, 2005 and November 30, 2006 with a medical claim for BoNT-A (UB92 or CMS1500) and an ICD-9 diagnosis for headache or migraine on the same claim. **RESULTS:** In the 12-month analysis period, approximately 2.88 million people visited a physician for headache or migraine. Only 1754 patients (0.06%) received treatment with BoNT-A; the vast majority (80%) had a specific diagnosis of migraine, not a general diagnosis of headache. BoNT A recipients were between 40–59 years of age (46%) and most were female (83.1%); BoNT-A treatment was most often (84%) prescribed by a neurologist. Fewer (26%) BoNT-A treated users compared to non- BoNT-A users (52%) were using more than one medication to treat headache or migraine symptoms. In BoNT-A users, the use of combination pain medication (≥ 2 of the following: opioid analgesic, non-narcotic analgesic, topical anesthetic, NSAID or synthetic narcotic) was significantly reduced in the 90 days after BoNT-A treatment ($p < 0.01$). **CONCLUSION:** BoNT-A treated users are mostly migraine sufferers. BoNT A treated patients required less pain medication. Further research needs to be conducted to determine whether BoNT-A impacts overall treatment costs.

SYSTEMIC DISORDERS/CONDITIONS— Clinical Outcomes Studies

PSYI

META-ANALYSIS OF ANTICONVULSANTS, SNRIS AND TCAS IN TREATING NEUROPATHIC PAIN

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OBJECTIVE: To summarize clinical rates in treating neuropathic pain of three drug classes: tricyclic antidepressants (TCAs), serotonin-norepinephrine reuptake inhibitors (SNRIs), and anti-convulsants (ACs). **METHODS:** Patients included adults diagnosed with neuropathic pain experienced >3 months. We accepted double-blinded randomized clinical trials using any drug within these classes against placebo/active comparator. Outcomes reported were pain score changes on a visual analog scale (VAS), partial response and response (30% and 50% reduction, respectively), and ADR dropout rates. Two independent reviewers searched Medline, Embase, and Cochrane databases (inception to 2007), plus references from retrieved articles. Discrepancies were resolved by consensus (adjudication by a third reviewer). Data were extracted/verified similarly. Quality was similarly assessed using Jadad's method. Homogeneity of effects was determined using Chi-square and I-square. Data were combined using a random-effects model. **RESULTS:** From 115 articles, 84 were excluded (45 inappropriate drugs, 20 inappropriate patients, 12 unacceptable designs, five insufficient outcome data, one duplicate, and one not located), leaving 28. Thirteen studies ($N = 1257$) evaluated ACs (gabapentin, pregabalin), five SNRIs ($N = 781$), and ten TCAs ($N = 249$). One evaluated both ACs and TCAs. Quality was $81\% \pm 21\%$ overall. Weighted mean baseline-endpoint VAS differences were: TCAs = 1.8 (95%CI = 1.2–2.4; 13 studies, $N = 249$), SNRIs = 2.7 (95%CI = 2.4–3.0; 10 studies, $N = 781$), and ACs = 2.4. 2 were significant and 12 were χ (95%CI = 2.0–2.8; 20 studies, $N = 1257$). All 63%–90%, indicating heterogeneity. For partial response, we analyzed 17 study arms ($N = 1439$), nine involving ACs ($n = 870$), four examining SNRIs ($n = 458$), and four that studied TCAs ($n = 111$). Rates were: SNRIs = $66.0\% \pm 2.2\%$, ACs = $54.5\% \pm 3.7\%$, and TCAs = $49.2\% \pm 6.6\%$. For full response, 27 study arms were

summarized: SNRIs = $45.9\% \pm 2.3\%$, ACs = $36.3\% \pm 3.2\%$, and TCAs = $32.3\% \pm 4.4\%$. ADR dropout rates were: ACs = $12.3\% \pm 1.8\%$ ($N = 1,259$), SNRIs = $12.0\% \pm 2.3\%$ ($N = 732$), TCAs = $11.7\% \pm 2.7\%$ ($N = 267$). **CONCLUSION:** For all success measures, SNRIs rates were highest, then ACs, then TCAs. Dropout rates were comparable among drug classes.

PSY2

THE DEVELOPMENT OF A STANDARDIZED CLINICAL ALGORITHMIC PREDICTOR OF WEIGHT LOSS AFTER BARIATRIC SURGERY: DATABASE ANALYSIS ENABLES EMPIRICAL AND STATISTICAL PREDICTION OF THRESHOLD WEIGHT LOSS BY END OF THIRD POST-OPERATIVE PHYSICIAN VISIT

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OBJECTIVE: To use clinician reported data pre- and post-operative in bariatric surgery patients to create an algorithm for the development of a standardized tool, for use by bariatric surgeons within a confidence interval, to determine the maximum weight loss threshold from roux en y surgery by the third physician visit. **METHODS:** Retrospective database analysis (2000–2007) of empirical clinical data, pre- and post-operative, for bariatric patients in Western New York. A multivariate model examined the relationship between % excess body weight lost (BWL) at the first three post-operative visits and % BWL at the sixth post-operative visit (V6), using SAS 9.1. Percent excess BWL was plotted vs. days elapsed from surgery. 179 obese adults (women = 155, 86.6%) received gastric bypass surgery, mean BMI = 53, (SD = 9.6), mean excess body weight at time of procedure = 185 lbs (SD = 65.3). **RESULTS:** Outcomes were available for 158 patients (women = 137, 86.7%) at V6 (mean = 707 days), mean BMI = 35.2 (SD = 7.7), women = 34.7 vs. men = 38.1. Mean % excess BWL at V6 was 60% (SD = 18%). Women had more BWL than men (61% vs. 55%). For females, BWL was maximized at 870 days post-operation, the equation fit for males did not yield an absolute maximum, leveling off at 740 days (monthly change rate $< 0.5\%$ /month). Our model included linear and non-linear components to correlate the relationship between the total % excess BWL at V6 and % excess BWL at the first three visits. All variables, except BWL at the second visit, were statistically significant. The algorithm had a predictive accuracy of 94%. **CONCLUSION:** The excess BWL at the third visit is predictive of the final excess BWL, following surgery. Gender and initial BMI displayed significant relationships with final weight loss. The algorithm derived from this sample will support the development of a standardized tool to assist physicians in their post-operative prognosis of gastric bypass patients.

PSY3

A META-ANALYSIS OF RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED TRIALS OF THE EFFICACY OF BOTULINUM TOXIN A FOR THE PROPHYLAXIS OF CHRONIC MIGRAINE HEADACHES

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OBJECTIVE: To assess the ability of BTX-A injections to lower migraine frequency in chronic sufferers. **METHODS:** Two reviewers independently searched PubMed, Google Scholar and Cochrane Library to locate randomized, double-blind, placebo-