Health) was conducted. SourceX™ 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 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

PSY1

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% ± 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 I2 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 = 45.9% ± 2.3%, ACs = 36.3% ± 3.2%, and TCAs = 32.3% ± 4.4%. ADR dropout rates were: ACs = 12.3% ± 1.8% (N = 1,259), SNRIs = 12.0% ± 2.3% (N = 732), TCAs = 11.7% ± 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 = 153, 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 at V6 and % excess BWL at the first three visits. All variables, except BWL at the second visit, were statistically significant. 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-
controlled trials of BTX-A for chronic migraines. Differences were settled via consensus. Data extraction/verification was managed similarly. The primary outcome was baseline-endpoint change in migraine frequency (number/month). Heterogeneity was assessed using $\chi^2$ and I-squared. Two raters assessed study quality using the Downs-Black scale, with adjudication via consensus. A fixed-effects model combined study results using the standardized mean difference (Cohen’s d) in monthly migraine frequency between placebo and BTX-A groups. RESULTS: Nine trials (N = 2114; BTX-A = 1388, placebo = 726; 2059 completed their trials) provided data in 19 study arms and 9 placebo arms. The average age was 43 +/- 3, duration of illness was 20 +/- 3 years, average number of migraines was 6.0 +/- 2.1/month, 84% were females. All $\chi^2$ were non-significant; all I-squared were 0, suggesting combinability and confirmed using a fixed-effects model. Quality scores averaged 67% +/- 4% (“fair”; range:62%−75%). The weighted average treatment effect (Cohen’s d) of BTX-A over placebo was −0.05 (CI95% = −0.13, 0.03) when measured 30 days after injection, −0.04 (CI95% = −0.12, 0.04) at 60 days, and −0.04 (CI95% = −0.12, 0.04) at 90 days post-injection. The comparisons out of 57 were significant; one by Relja after 60 days and one by Yo after 90 days. Controlling for placebo effect and stratifying by dose stratification found no significant effect of BTX-A in reducing migraine frequency per month over saline vehicle. CONCLUSION: BTX-A used as prophylactic treatment of chronic migraine headaches does not decrease monthly numbers of migraines.