**Table C** (Supplemental). Treatment effect on secondary outcomes within 7-days postoperatively

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **BPI outcomes during 7 postop days** | | **Stimulation**  **(N=31)** | **Sham (Placebo)**  **(N=34)** | | **Difference in Means**  **(Stimulation - sham ) \*** | | **P-value \*** | | | |
| **BPI Worst pain score** | | |  | |  | |  | |
| Overall | | 2.9 ± 2.2 | 5.5 ± 2.0 | | 2.5 (-3.5, -1.4) | | <0.001 | |
| Treatment\*time interaction | | |  | |  | | 0.292 | |
| POD 1 | | 3.8 ± 3.3 | 6.1 ± 3.4 | | -2.2 (-3.6, -0.8) | | 0.002 | |
| POD 2 | | 3.9 ± 2.3 | 6.9 ± 2.6 | | -2.9 (-4.2, -1.5) | | <0.001 | |
| POD 3 | | 2.6 ± 2.6 | 5.8 ± 2.6 | | -3.1 (-4.5, -1.8) | | <0.001 | |
| POD 4 | | 1.9 ± 2.4 | 4.7 ± 2.5 | | -2.6 (-4.0, -1.3) | | <0.001 | |
| POD 7 | | 2.1 ± 2.5 | 3.9 ± 2.5 | | -1.6 (-3.0, -0.3) | | 0.019 | |
| **Least pain score** | |  |  | |  | |  | |
| Overall | | 0.2 ± 0.6 | 1.0 ± 1.6 | | -0.8 (-1.3, -0.2) | | 0.007 | |
| Treatment\*time interaction | | |  | |  | | 0.001 | |
| POD 3 | | 0.2 ± 0.6 | 1.4 ± 1.8 | | -1.2 (-1.8, -0.6) | | <0.001 | |
| POD 7 | | 0.2 ± 0.7 | 0.7 ± 1.6 | | -0.4 (-1.0, 0.2) | | 0.225 | |
| **Current pain score** | | |  | |  | |  | |
| Overall | | 0.4 ± 0.6 | 1.9 ± 2.0 | | -1.5 (-2.2, -0.7) | | <0.001 | |
| Treatment\*time | |  |  | |  | | 0.054 | |
| POD 3 | | 0.4 ± 0.7 | 2.3 ± 2.3 | | -1.8 (-2.7, -1.0) | | <0.001 | |
| POD 7 | | 0.3 ± 0.8 | 1.5 ± 2.2 | | -1.1 (-1.9, -0.3) | | 0.011 | |
| **Total Severity score** | | |  | |  | |  | |
| Overall | | 3.7 ± 4.4 | 10.3 ± 7.2 | | -6.1 (-9.1, -3.2) | | <0.001 | |
| Treatment\*time | |  |  | |  | | 0.001 | |
| POD 3 | | 4.0 ± 4.6 | 12.6 ± 7.7 | | -8.1 (-11.0, -5.0) | | <0.001 | |
| POD 7 | | 3.3 ± 4.7 | 8.0 ± 7.6 | | -4.2 (-7.3, -1.1) | | 0.009 | |
| **Total interference score** | |  |  | |  | |  | |
| Overall | | 2.6 ± 4.5 | 21.5 ± 17.9 | | -17 (-23, -10) | | <0.001 | |
| Treatment\*time | |  |  | |  | | < 0.001 | |
| POD 3 | | 2.6 ± 4.4 | 24.1 ± 19.4 | | -19 (-26, -13) | | <0.001 | |
| POD 7 | | 2.5 ± 4.9 | 19.0 ± 17.0 | | -14 (-21, -8) | | <0.001 | |
| **Defense and Veterans Pain Rating Scale** | |  |  | |  | |  | |
| Overall | | 1.3 ± 1.4 | 3.5 ± 2.3 | | -2.1 (-3.0, -1.1) | | <0.001 | |
| Treatment\*time | |  |  | |  | | 0.007 | |
| POD 3 | | 1.4 ± 1.5 | 4.2 ± 2.3 | | -2.6 (-3.6, -1.6) | | <0.001 | |
| POD 7 | | 1.1 ± 1.5 | 2.9 ± 2.5 | | -1.6 (-2.6, -0.6) | | 0.003 | |
| **Improvement from pain treatments (%) \*\*** | |  |  | |  | |  | |
| Overall | | 92 ± 14 | 73 ± 22 | | 18 (8, 27) | | <0.001 | |
| Treatment\*time | |  |  | |  | | 0.018 | |
| POD 3 | | 90 ± 16 | 67 ± 26 | | 22 (12, 33) | | <0.001 | |
| POD 7 | | 93 ± 13 | 79 ± 21 | | 13 (3, 24) | | 0.011 | |
| Data are presents as mean ± SD. Average scores over postoperatively 7 days of each patient were used for overall summary statistics.  \* Difference in means (95% CI) as stimulation minus sham(placebo) was estimated from a repeated measures linear mixed effects model with an autoregressive correlation structure adjusting for baseline BPI for the individual component and imbalanced surgical location.  \*\* only adjusting for the surgical location due to 80% missing data points of baseline improvement from pain treatments. | | | | | | | | |