

Transversus Abdominis Plane Block as Treatment Modality for Chronic Abdominal Pain

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Background/Introduction: Chronic abdominal pain can be an especially difficult condition to treat and manage for patients and providers. Few treatment options exist and patients are left with medications that may have limited efficacy, lead to addiction, and present with issues in the future. This study describes the use of transversus abdominis plane (TAP) blocks to treat and manage chronic abdominal pain in patients who have exhausted other treatment options. Typically, this is a procedure prescribed for treating acute abdominal pain following various abdominal surgeries. In this article, we evaluate the use of TAP blocks for longer relief from chronic abdominal pain. The objective of this study is to assess the efficacy of TAP blocks for pain control in patients with chronic abdominal pain. Identifying other treatment modalities could increase the quality of life for patients with chronic abdominal pain, while reducing the risks associated with opioid usage.

Methods: This was a retrospective chart review and data analysis of TAP block procedures performed over a length of five years. We reviewed the charts of 92 patients who had received TAP blocks for their chronic abdominal pain after previous forms of pain management were ineffective. Some patients underwent multiple TAP blocks, with a total of 163 individual procedures identified in this review. Data collected included patient demographics, medications, surgical history, emergency department visits, TAP block procedure details, and improvement following each block. For the majority of blocks, a solution of 0.25% bupivacaine (Marcaine) and triamcinolone (Kenalog) was injected into the TAP. Efficacy of the injection was measured using pain scores before and after the procedure, percent improvement, as well as duration of relief from pain.

Results: TAP blocks were associated with a statistically significant (p -value ≤ 0.05) improvement in abdominal pain scores in 81.9% of procedures performed. Percentage improvement was $50.3\% \pm 39.0\%$ with an average duration of improvement of 108 days after procedures with ongoing pain relief at time of follow up were removed. There was a statistically significant reduction in ER visits for abdominal pain before and after the procedure (p -value ≤ 0.05).

Conclusion: The role of the TAP block can be extrapolated for treating abdominal pain beyond acute settings. TAP steroid injections can be considered as a treatment option for patients with somatosensory chronic abdominal pain refractory to other forms of pain management.