

# Postoperative Pain Management after Spinal Fusion Surgery: An Analysis of the Efficacy of Continuous Infusion of Local Anesthetics

## Abstract

Spinal fusion surgery is a major surgery that results in severe postoperative pain, therefore pain reduction is a primary concern. New strategies for pain management are currently under investigation and include multimodal treatment. A 3-year retrospective analysis of patients with idiopathic scoliosis undergoing spinal fusion surgery was performed at our hospital, assessing patient pain scores, opioid use, and recovery. We evaluated the effect of adding continuous infusion of local anesthetics (CILA) to a postoperative pain management protocol that includes intraoperative intrathecal morphine, as well as postoperative patient-controlled analgesia and oral opioid/acetaminophen combination. The study compared 25 patients treated according to the standard protocol, with 62 patients treated with CILA in addition to the pain management protocol. Patients in the CILA group used nearly 0.5 mg/kg less opioid analgesics during the first 24 hours after surgery.

## 脊柱融合手術後的術後疼痛管理：持續注射局部麻醉劑的療效分析

脊柱融合術是一個大型手術，並會導致嚴重的術後疼痛，所以，減少疼痛是首要關注的問題。目前正在研究疼痛管理的新策略，並包括綜合治療。在我們醫院為進行了脊柱融合術的特發性脊柱側凸患者的進行了為期 3 年的回顧性分析，評估患者的疼痛評分，嗎啡類藥物的使用和康復。我們評估持續注射局部麻醉藥（CILA）對術後疼痛管理的影響，包括術中鞘內嗎啡，以及術後病人自控的鎮痛藥，及以口服嗎啡類/乙醯氨酚的組合。這項研究比較了按照標準治療的 25 個患者，和 62 個在疼痛管理協議再加上 CILA 治療的患者。CILA 組別的病人在手術後首 24 小時內使用少了 0.5 毫克/公斤嗎啡類止痛藥。