Regional Anesthesia and Patients receiving Opioid Maintenance Therapy

Primary Author: Neha Pawar MD
Strong Memorial Hospital, University of Rochester

Co-Authors: Daryl Smith, MD;

The use of regional anesthesia has been shown to reduce the opiate requirement in the perioperative period, decrease surgically induced pain sensitization; and produce better postoperative analgesia. In addition the use of regional anesthesia results in fewer opiate-related side effects and is thought to help prevent the development of opioid induced hyperalgesia. In this systematic analysis we systematically searched the literature for randomized controlled trials addressing: Opioid Maintenance Therapy AND Peripheral Nerve Blocks AND Postoperative Pain. The electronic search criteria are found in the table below. The search produced 4021 references of which 269 were RCTâ€™s. Of these, 10 articles satisfied our search criteria and were thus selected for qualitative and quantitative analysis. In these studies we found a decreased inpatient opioid requirement and a decreased hospital length of stay in patients undergoing major surgical procedures who received multimodal analgesia. In addition the analysis showed a significant decrease in opioid use and length of stay as compared to regional blocks alone. Further randomized clinical trials are needed to evaluate the impact of multimodal analgesia on short and long-term recovery after major surgeries in patients on opiate maintenance therapy.