

# Billing Accuracy of Peripheral Nerve Blocks as the Primary Anesthetic Performed in the Preoperative Holding Area: A Comparison Between Block Team and Intraoperative Anesthesia Team

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## Introduction

Billing for nerve blocks can be complex due to the current reimbursement models in the United States. Adequate documentation of anesthesia start (*Astart*) is essential to improve billing for regional anesthesia. We hypothesized that the involvement of a specialized regional anesthesia team would lead to increased billing efficiency and more accurate documentation of *AStart*.

## Objective

To compare billing accuracy between cases where a block team performs the nerve block and cases where the intraoperative anesthesia team performs the nerve block

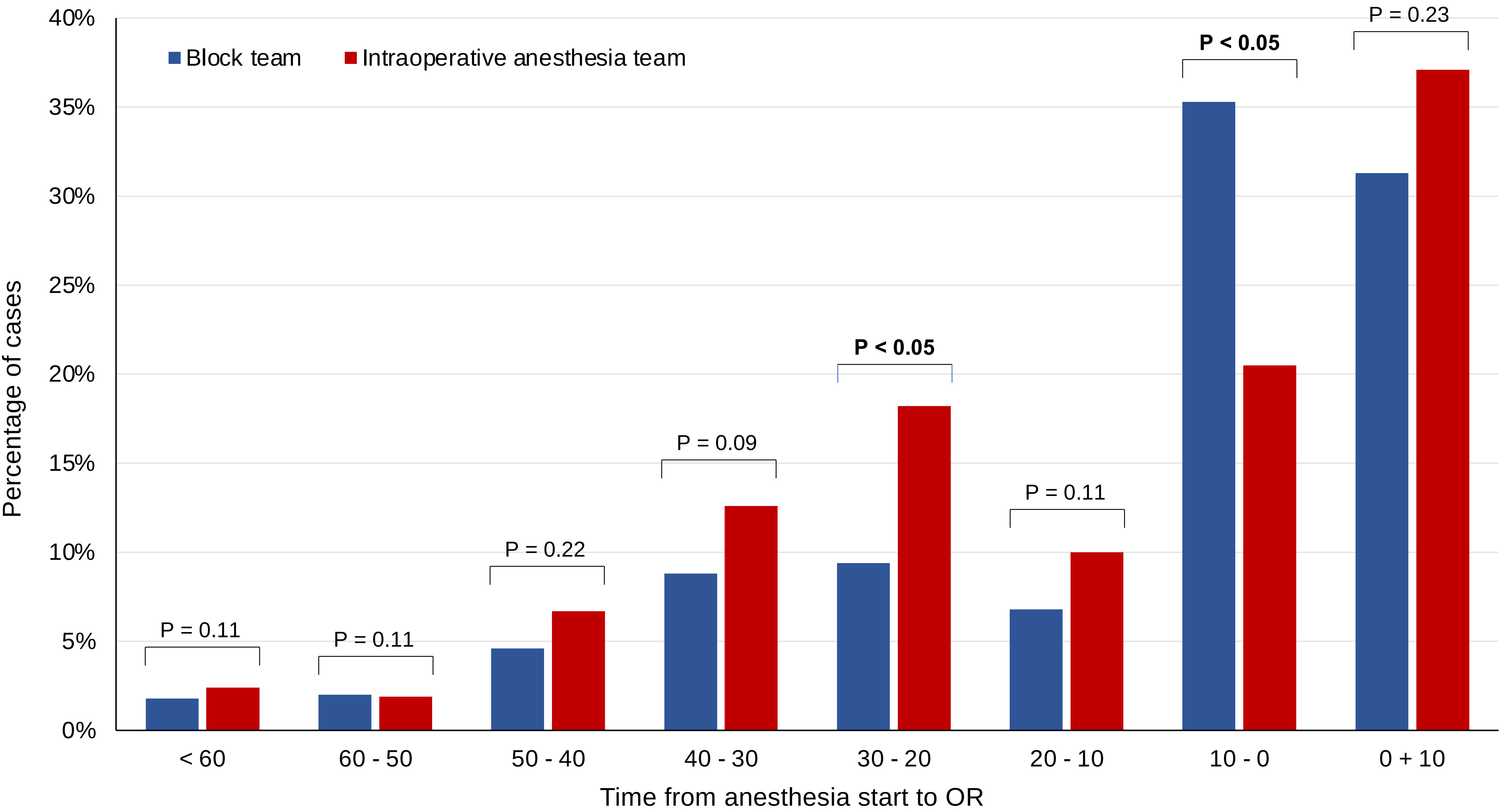
## Material and Methods

- **Study design:** Retrospective cohort.
- **Population:** Patients who underwent surgery with a peripheral nerve block as the primary anesthetic between January 2022 and May 2023.
- **Primary outcome:** Inaccurate billing was defined as *AStart* occurring less than 10 minutes before the documented in-operating room time.
- **Analysis:** Group differences were assessed by Chi-squared and U-Mann-Whitney tests.

## Results

A total of 745 cases were undertaken with a nerve block as the primary anesthetic. The regional anesthesia team was involved in 482 (64.5%) cases, while general anesthesiologists were involved in 263 (35.3%) cases.

- Higher rates of inaccurate *AStart* documentation in the block team (316/439, 71.9%) compared to blocks performed by general anesthesia attendings (123/439, 28.0%,  $P < 0.001$ ).
- Estimated loss in billable revenue during the study period: **\$70,265**.
- No difference in the mean estimated loss of revenue per cases by block team versus same anesthesia attending (**\$169 ± \$442 vs \$108 ± \$114,  $P=0.126$** ).



## Discussion

*Having a separate block team involved was associated with less accurate and less efficient billing according to our definitions.*

### Possible reasons:

- The burden of documentation often falls on the trainee, even though the attending should be responsible for reviewing.
- The pool of attendings who are assigned to the block team rotates each day.

### Strategies to improve documentation:

- Education about accurate documentation of nerve blocks for supervising anesthesiologists as well as for fellows and residents.
- Documentation of *Astart* during time-out prior while preparing for procedure.

### Limitations:

- Single center retrospective study from a large and complex medical center
- This analysis compared attending anesthesiologist, who, while supervising the block, may not have been directly involved with documentation.

## Works Cited

Kim TWE, Mariano ER. *Int Anesthesiol Clin*. 2011;49(3):84-93.  
Chin A, et al. *Anaesth Intensive Care*. 2017;45(6):714-719