



# Implementation of a Standardized Analgesia Protocol for Idiopathic Scoliosis Surgery

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## Background:

Adolescent idiopathic scoliosis surgery is one of the most commonly performed surgeries at pediatric hospitals. A variety of pain control regimen have been utilized, but there is no standardized protocol. We implemented a multi-modal analgesic regimen in September 2017.

## Methods:

We retrospectively collected data on 25 patients who have undergone idiopathic scoliosis after implementation of the protocol. We also collected data on 30 patients who had the surgery prior to the protocol. Relevant data collected include age, weight, BMI, hospital length of stay (LOS), opioid consumption, as well as any complications.

	Scheduled	PRN
OR	Methadone (0.1 mg/kg up to 5 mg) TIVA (remifentanyl, ketamine, propofol) IV acetaminophen (15 mg/kg)	Other narcotics
POD0	IV methadone (Q12H x 3 doses) IV acetaminophen (Q8H x 3 doses) IV methocarbamol (Q8H x 7 doses) IV Ketorolac (Q6H x 7 doses) IV Zofran (Q8H x 5 doses)	PCA hydromorphone PO valium 2 mg (Q6H) IV Nubain (15 mcg/kg)
POD1	PO oxycodone Q6H PO Tylenol Q6H	d/c PCA, Q3H hydromorphone
POD2	PO Ibuprofen (Q6H, after ketorolac completes)	PO Zofran (after IV Zofran completes)

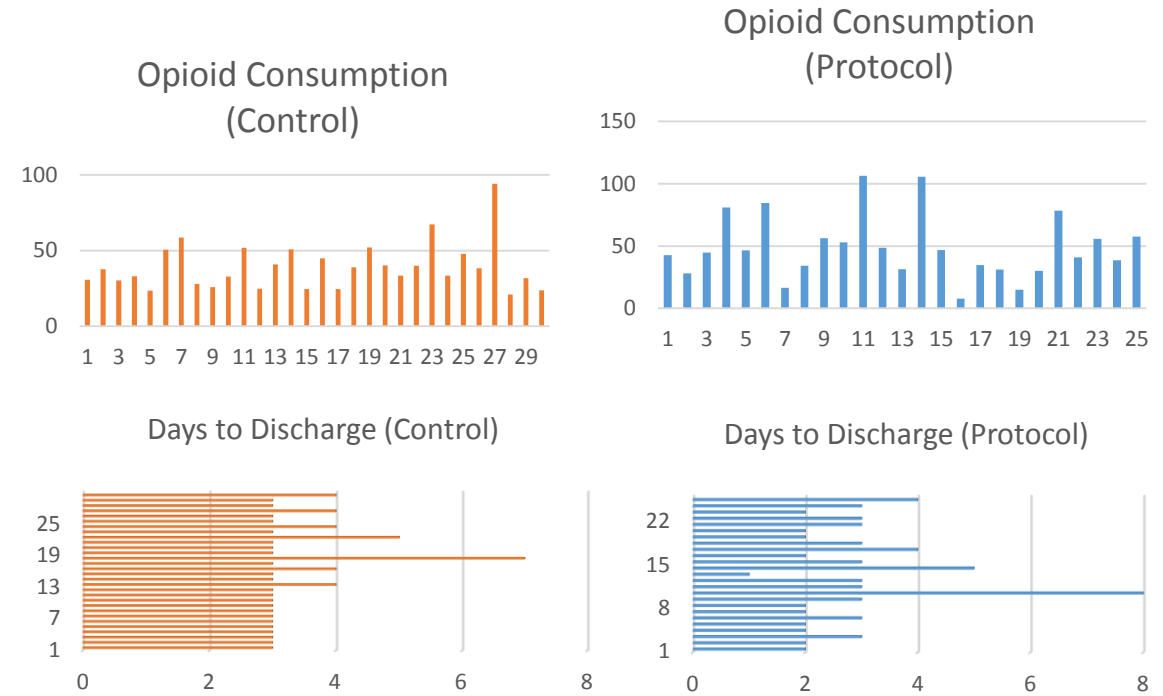
## Conclusions:

The implementation of a standardized multi-modal analgesia protocol facilitated an earlier discharge for most of the patients, but did not reduce the amount of opioid used in the post-operative setting.

## Objectives:

To implement an evidence-based regimen in scoliosis surgery to facilitate a better and faster recovery.

## Results:



The majority of patients on the protocol were being discharged on POD2, while the control group was being discharged on POD3. The opioid consumption was actually higher on the new protocol, likely due to the higher dose of PCA ordered, as well as the oral analgesic being scheduled instead of PRN.

The protocol initially included pregabalin, but there were three cases of urinary retention that were attributed to the drug, and it was eliminated from the protocol.