



# The Amputation Epidemic from the Anesthesiologist's Perspective

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## BACKGROUND

- Amid a great upheaval in American healthcare brought on by the Sars-CoV-2 (COVID-19) pandemic there have been many unforeseen consequences. One such consequence has been a significant increase in amputations since 2020.
- The anesthesiologist plays a critical role in perioperative management of patients undergoing amputations.
- Given the suggested benefit of continuous peripheral nerve blocks (CPNB) for perioperative pain control, our institution began performing more of these procedures for this patient population.

## PURPOSE/AIMS/HYPOTHESIS

- Determine if our institution experienced an increase in lower extremity amputation procedures during the time of the 'amputation epidemic' while observing to see if we were able to increase our utilization of CPNBs during this time.

## METHODS

- Following institutional review board approval, we utilized our institution's electronic medical record system to analyze the amount of Below Knee Amputations (BKAs) and Above Knee Amputations (AKAs) performed from January 1, 2016, through December 31, 2022.
- If both continuous sciatic and femoral nerve blocks were performed, the patient was categorized in the "2 PNC" group.
- If either a continuous sciatic or femoral nerve block was performed, the patient was categorized in the "1 PNC" group.
- If only single shot nerve blocks were performed, the patient was categorized in the "SS Only" group.
- If regional anesthesia was not performed, the patient was categorized in the "no regional" group.

## RESULTS

Figure 1

Amputations per Year

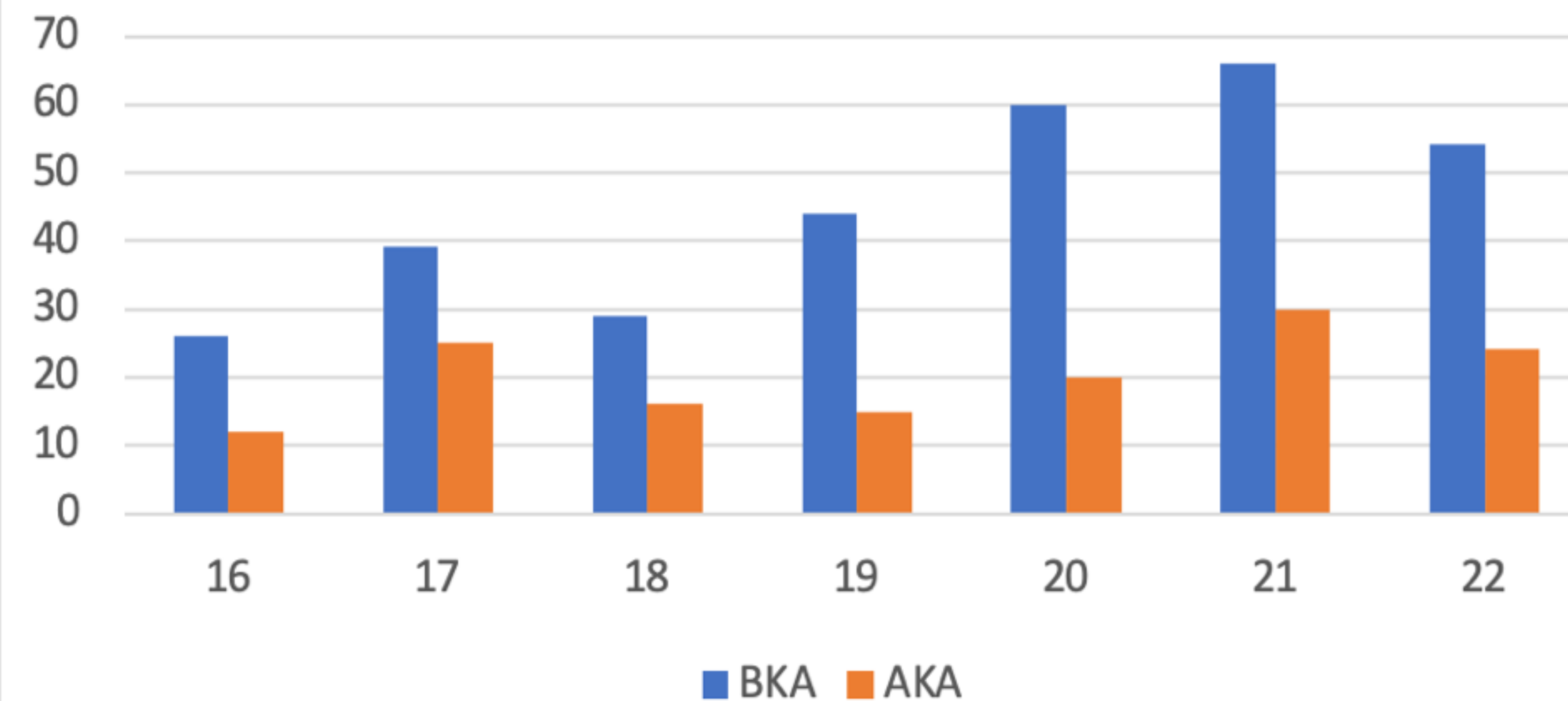
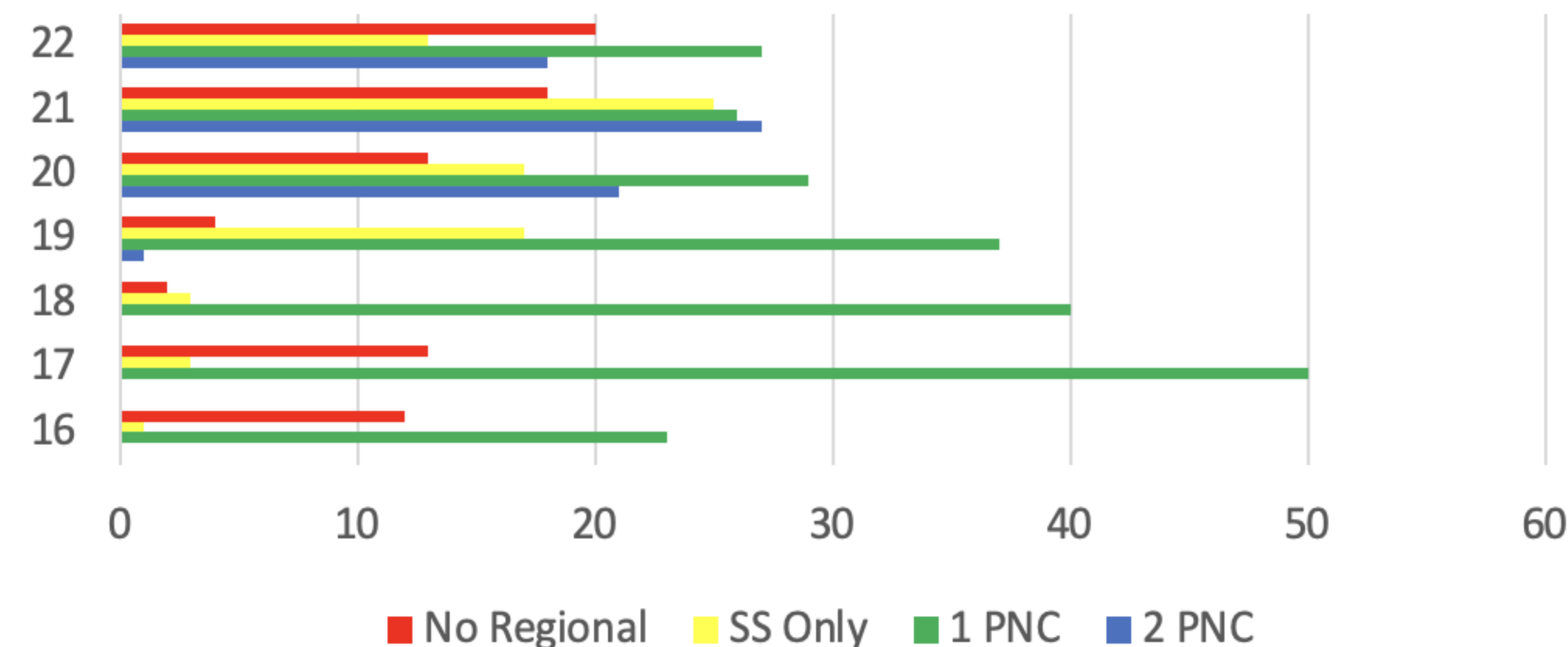


Figure 2

Analgesic Technique Per Year



## RESULTS

- From 2019 to 2021, there was an increasing trend of both BKAs and AKAs (figure 1).
- For these amputations, we saw an increase in the usage of 2 PNC, there was a decrease in 1 PNC (figure 2).

## DISCUSSION

- Our large academic institution was afflicted with the amputation epidemic as lower extremity amputations doubled between 2019 and 2021.
- There was a shift to a tailored regional anesthesia technique of multiple continuous peripheral nerve catheters within this patient population in the hopes of optimizing non-opiate based perioperative pain relief.

## CONCLUSION

- It is likely that many if not most large institutions have experienced the amputation epidemic since the onset of the COVID-19 pandemic.
- Considering this epidemic, we recommend that institutions performing an increasing number of amputations should re-evaluate their perioperative analgesic plans.
- Optimizing pain control can lead to an increased quality of life.

## REFERENCES

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