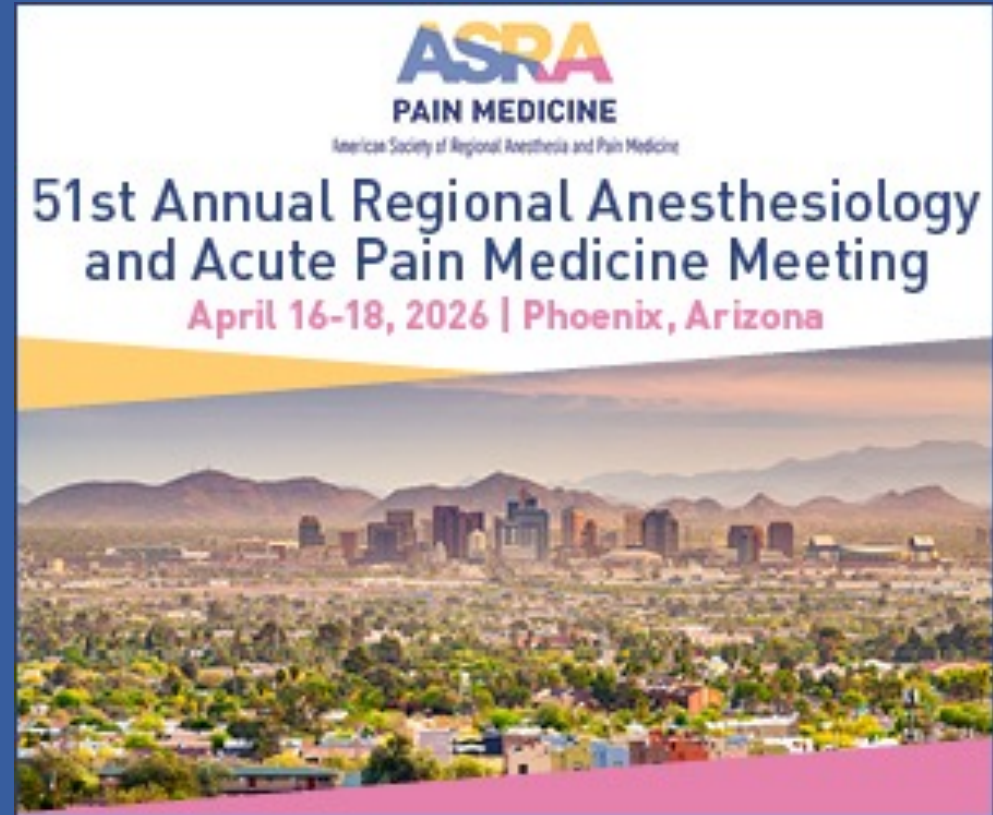




Rising Lower Extremity Amputations: A Decade Long Institutional Trend Highlighting the Need for Further Investigation

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BACKGROUND

- Lower extremity amputation affects 500,000 people annually in the U.S., with 2.3 million living with limb loss in 2019, projected to reach 3.6 million by 2050.
- Amputation pain includes neuropathic, phantom, and residual limb pain, which can become chronic if not managed perioperatively. Delayed pain control worsens outcomes.
- After a decline in the 2010s, amputation rates rose again in the early 2020s.

PURPOSE/AIMS/HYPOTHESIS

- This study examines institutional trends amid national increases.

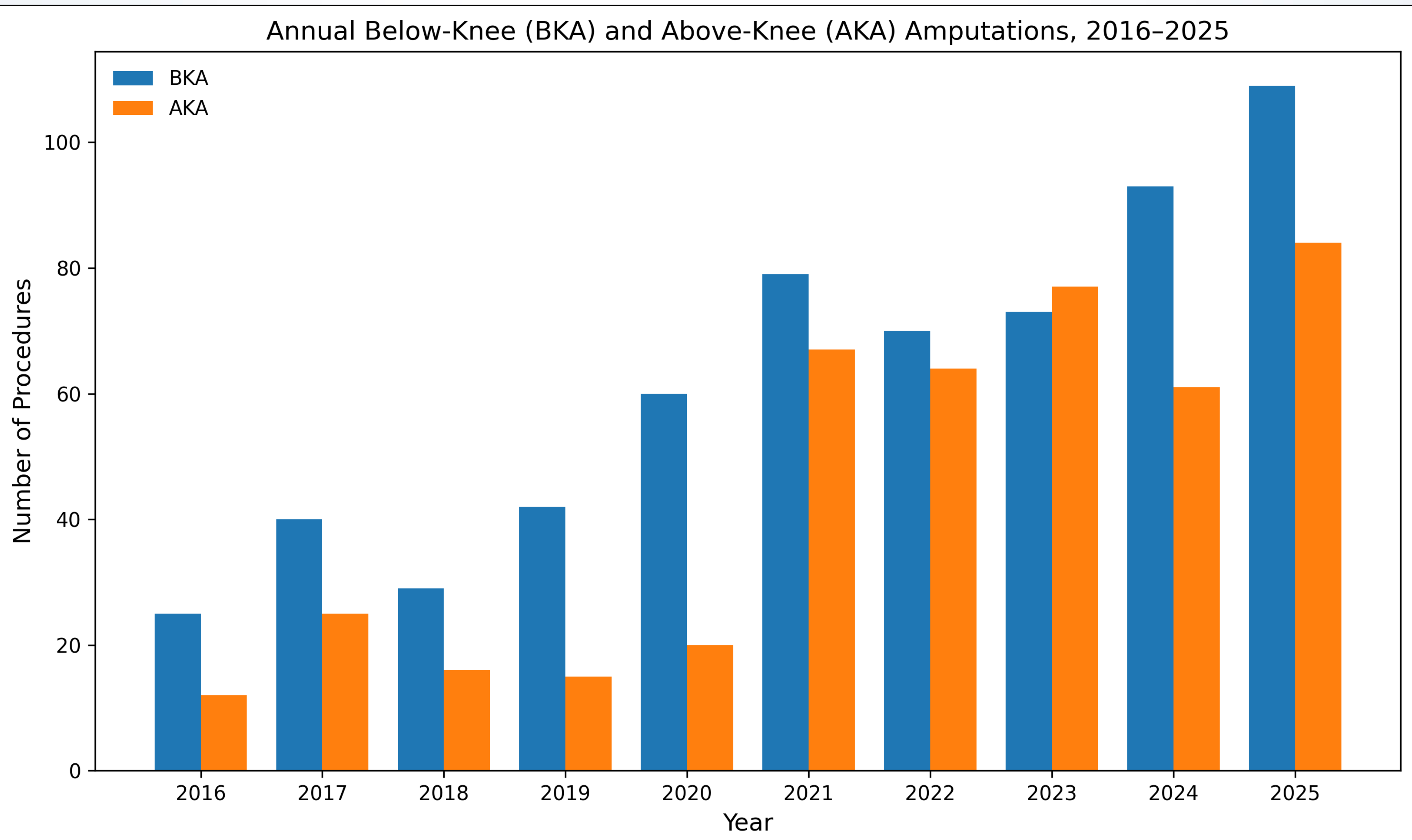
METHODS

- Following Institutional Review Board (IRB) approval, we utilized our institution's electronic medical record system to calculate the amount of BKAs and AKAs performed from January 1, 2016, through December 31, 2025.

RESULTS

- From 2016 to 2025, lower extremity amputations increased substantially, with rises observed in both below-knee (BKA) and above-knee (AKA) amputation procedures.
- BKA procedures rose from 25 in 2016 to a peak of 109 in 2025, while AKA volume increased from 12 in 2016 to 84 in 2025.
- Despite year-to-year fluctuations, the long-term trend demonstrated substantial growth in amputation volume across the decade.
- BKA procedures showed an upward trend with periodic declines, most notably between 2017–2018 and 2021–2022.
- In contrast, AKA procedures showed more pronounced variability but experienced larger single-year increases.
- Total amputations rose from 37 in 2016 to 193 in 2025, indicating more than a fivefold increase.

Figure 1



DISCUSSION

- Our institution shows a rise in lower-extremity amputations, though causes are unclear.
- A Northwestern Medicine study reported a 65% increase in leg and foot amputations in Illinois from 2016–2023.
- This, along with our observed increase, underscores the need for effective perioperative pain management.

CONCLUSION

- Poorly controlled postoperative pain raises chronic pain risk.
- Preventing chronic postamputation pain through nerve blocks, epidural anesthesia, and multimodal analgesics should be a key goal for the anesthesiologist.

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