Dexmedetomidine for Maternal Shivering During Cesarean Delivery: Impact on Maternal Core Temperature

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SOAP Consensus Statement and Recommendations for Enhanced Recovery After Cesarean

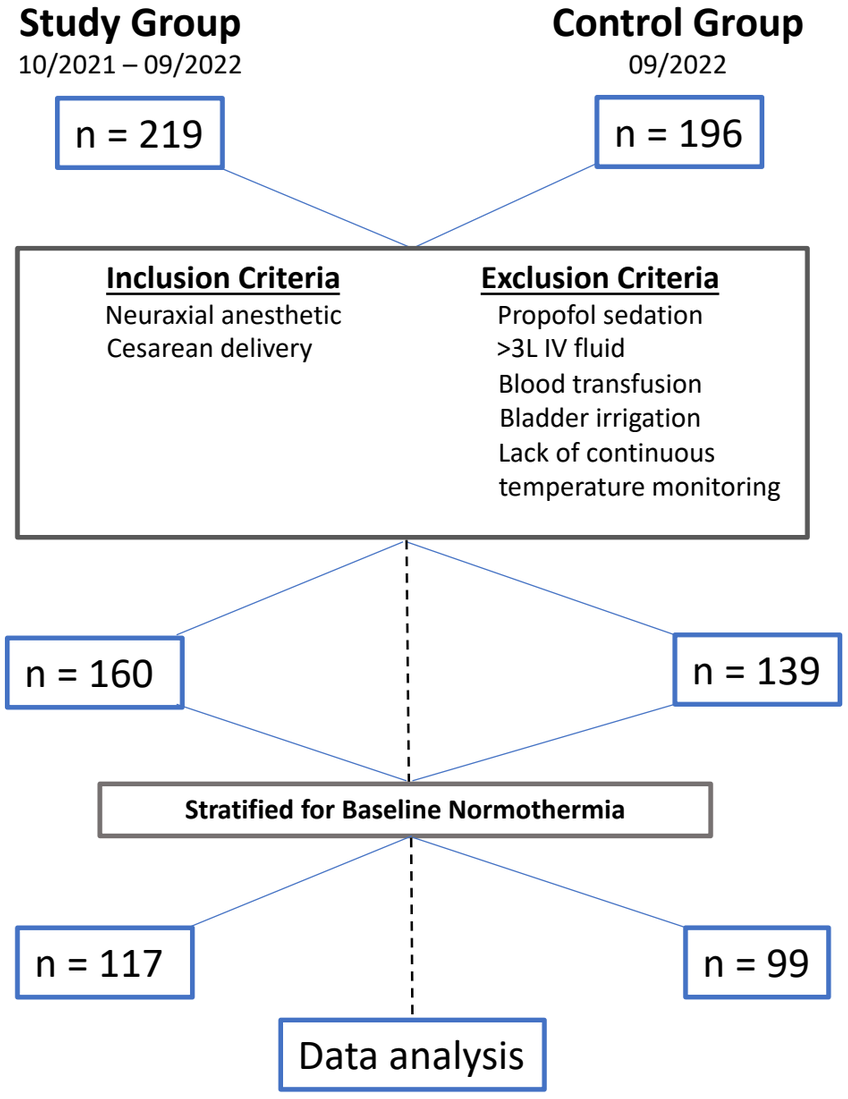
- Maintain normothermia by utilizing active warming
  - In-line IV fluid warmer
  - Forced air warming
  - Keep the OR temperature ideally >72°F or 23.0°C (Joint Commission guidance)

Hypothesis

Shivering is a heat-generating phenomenon.

→ *Does blunting maternal shivering with IV dexmedetomidine increase the risk of hypothermia during cesarean delivery?*

Estimated incidence of shivering while under a neuraxial anesthetic: 40-55%*

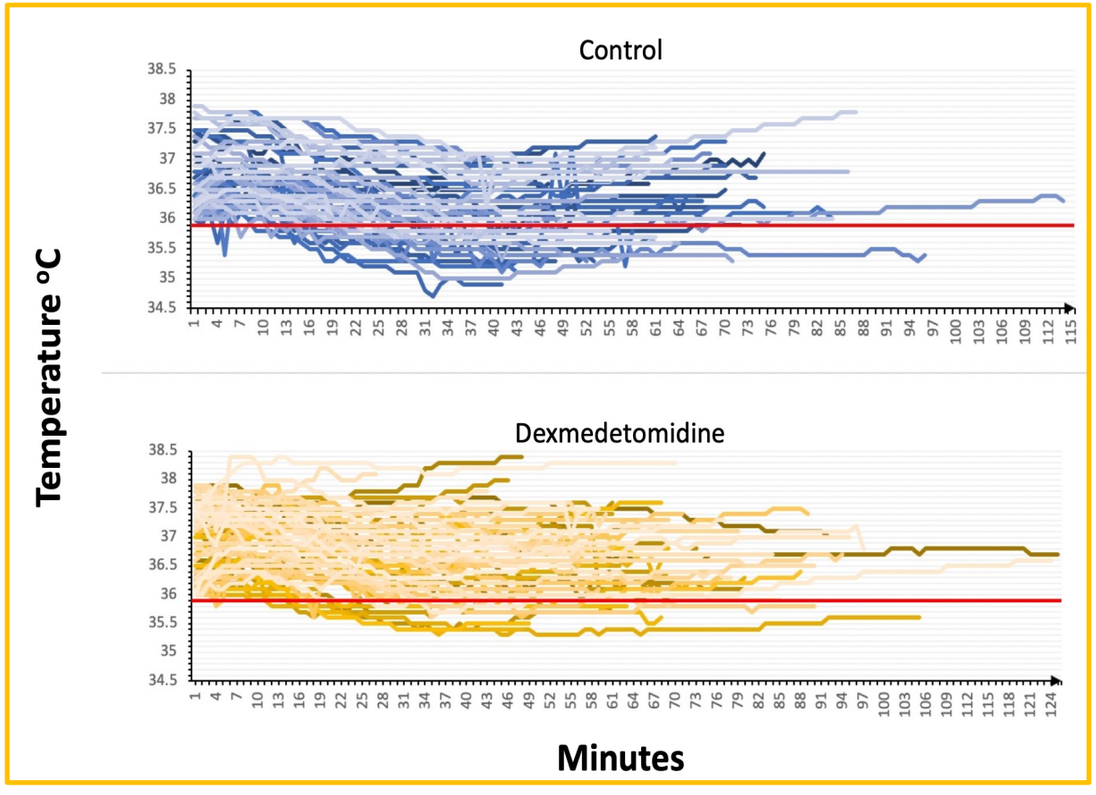


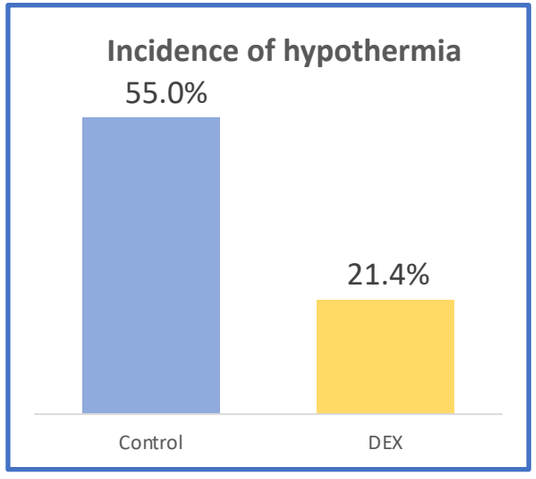
Study Group: Shivering patients that received dexmedetomidine

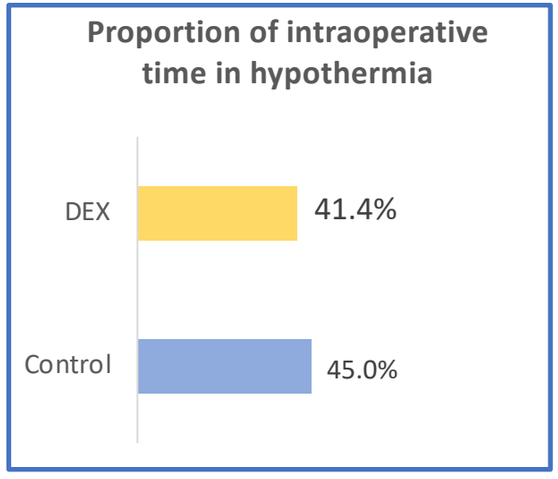
Control Group: Non-shivering patients who did not receive dexmedetomidine

Assumption verified via survey of 12 OB Anesthesiologists:

- When dexmedetomidine is used as the sole agent, it is used for treatment of shivering
- When dexmedetomidine is used in conjunction with propofol, it is used as an adjunct to sedation







Conclusions

- Dexmedetomidine **does not increase** the incidence or duration of hypothermia
- Patients who were **not shivering** and **did not receive dexmedetomidine** had a significantly higher risk of developing hypothermia.
- This patient subgroup may require more vigilant warming during cesarean delivery