

My patient's freezing and she doesn't even know it! Altered thermoregulatory response to spinal morphine: a teaching moment.

Paris Thompson MS-3, Harris Burton, MD, Katherine Hatter, MD, Latha Hebbar, MD

Background:

- Intrathecal morphine (ITM) → alters central thermoregulation via reduction in central thermoregulatory set point and peripheral vasodilation.

Presentation of altered thermoregulation:

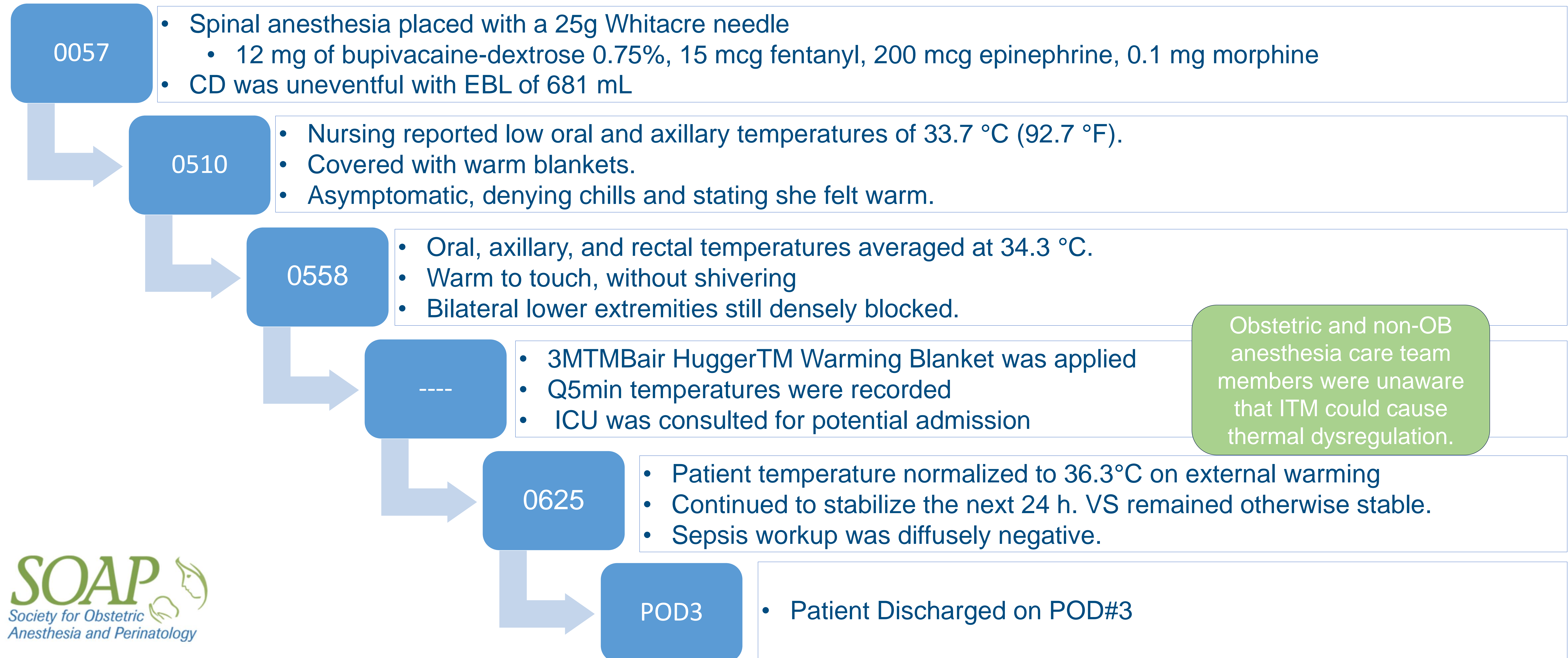
- Hypothermia
- +/- Paradoxical diaphoresis
- Subjective sense of warmth

We present a case of significant postoperative hypothermia (33.70C) that presented in PACU four hours after administration of ITM.

Case Description

- 30 y.o. G3P0020 at 29w5d
- PMH: CHTN
- Presented with SIPE with severe features and severe FGR, requiring CD at 30w1d.

My patient's freezing and she doesn't even know it! Altered thermoregulatory response to spinal morphine: a teaching moment.



My patient's freezing and she doesn't even know it! Altered thermoregulatory response to spinal morphine: a teaching moment.

Discussion: ITM is recommended as part of the ERAS protocol for post CD analgesia.

- ITM has known side effects (respiratory depression, pruritus, urinary retention, nausea/vomiting) that have established management strategies.
- Significant alteration of central thermoregulatory response causing severe hypothermia is a rare side effect of ITM that could get overlooked especially since patients feel paradoxically warm while they are hypothermic, cause a delay in the diagnosis, lead to institution of incorrect and unnecessary interventions and lacks established treatment protocols.
- If untreated, severe hypothermia can have catastrophic consequences including coma and cardiac arrest.
- In conjunction with external warming, there have been reports of pharmacological strategies of mixed opioid agonists and benzodiazepines due to the central nature of the dysregulation.
- **Overall, the lack of knowledge of this rare side effect of ITM can lead to compromised perioperative patient safety as providers unfamiliar with this phenomenon may not pursue pharmacologic therapy for quicker resolution, highlighting a need for education of OB and nursing staff on the post partum floor.**