

Transversus Abdominis Plane Catheters for Opioid-Free Analgesia Following Cesarean Delivery in a Patient with Mast Cell Activation Syndrome

Brian Vickers, MD; Narda Bondah, MS2; Margaret O'donoghue, MD

Background

MCAS is underrecognized and causes unpredictable, multi-organ allergy-like symptoms due to inappropriate mast cell mediator release

Common triggers include stress, temperature extremes, and mechanical friction

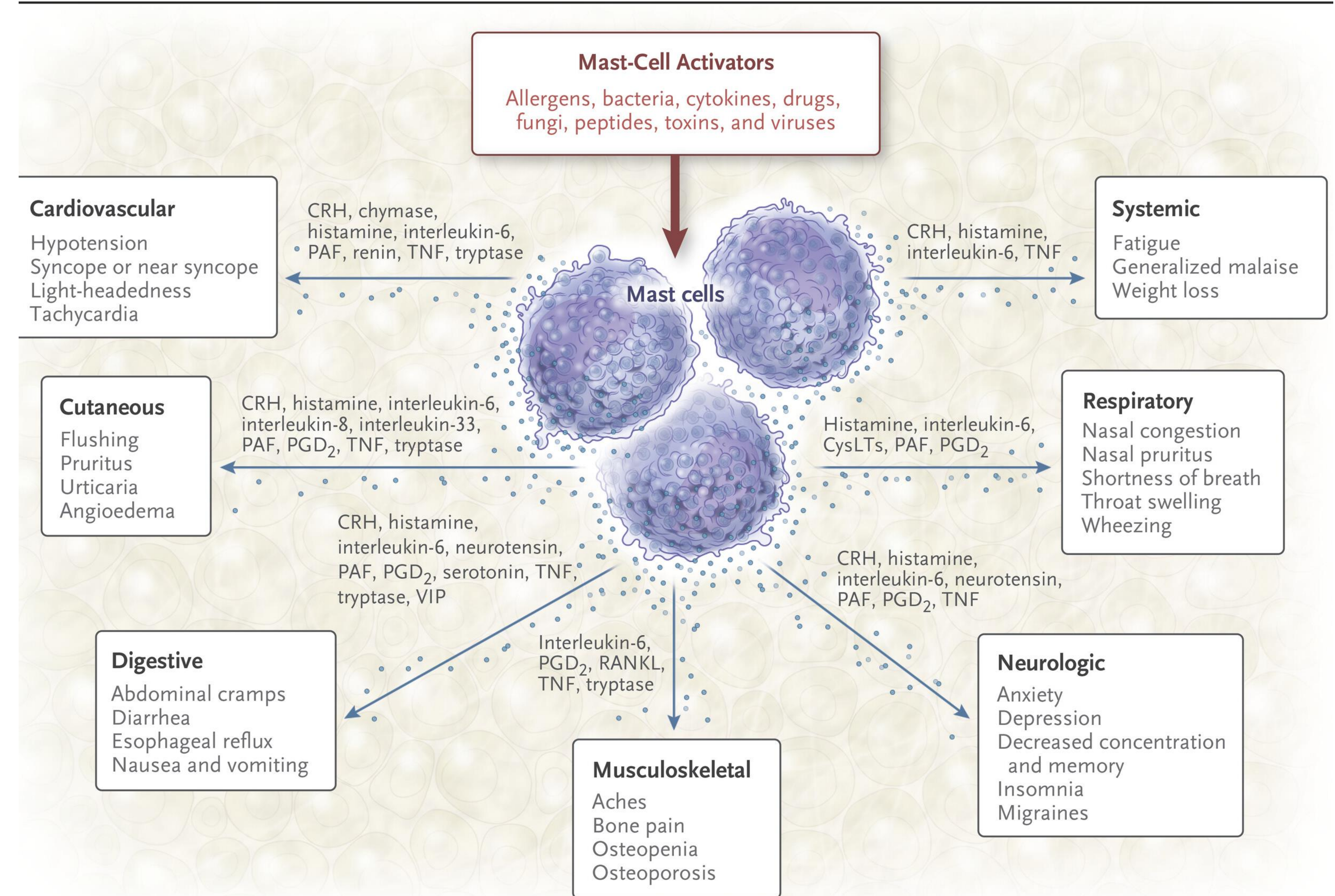
Unfortunately, also many drugs used commonly in anesthesia

Muscle relaxants (rocuronium and vecuronium may be safer alternatives)

Opioids (fentanyl and remifentanyl are considered safer)

Antibiotics (commonly vancomycin and fluoroquinolones)

NSAIDs and aspirin



The Case

- 28 y/o G1P0 at 37w1d presents for elective cesarean delivery
 - She has a history of spontaneous CSF leaks and declines epidural due to fear of recurrence
 - She has a history of MCAS with reported anaphylactic shock to opioids requiring ICU admission
- Multimodal opioid-free plan
 - Preop: famotidine, sodium bicitrate, acetaminophen, steroids
 - Intraop: bupivacaine spinal, anxiolysis with dexmedetomidine and doula, warm blankets and room, calm environment
 - Postop: bilateral TAP catheters, scheduled acetaminophen and ketorolac
- Pain scores 0-3/10 throughout admission, TAP catheters removed POD2

Teaching Points

- Opioid-free anesthesia is feasible for cesarean delivery
 - TAP blocks are a part of ACOG recommendations for postpartum pain management when neuraxial opioids are not used
 - TAP blocks do not appear to be useful adjuncts when neuraxial opioids are used
- Dexmedetomidine can offer effective anxiolysis and is not associated with adverse maternal outcomes or neonatal APGAR score effects
- Little evidence exists to help guide anesthesiologist taking care of patients with MCAS
 - NCCN Systemic Macrocytosis Guidelines identify drugs potentially safer to use