ASPIRE Obstetric Anesthesia Subcommittee Meeting

September 25, 2024

Agenda

- Announcements
- May Meeting Recap
- Azithromycin Measure Proposal Data and Vote
- Tranexamic Acid Measure Proposal
- Patient Pregnant Phenotype Update
- SOAP Center of Excellence Measure Discussion

New OB Subcommittee Vice-Chair

Congratulations to Wandana Joshi, DO and thank you for accepting this position!

Welcome New Members!

- Tariq Esmail, MD – University Health Network
- Justyna Batroszko, MD – University Health Network
- David He, MD – Mt. Sinai Toronto
- Josh Gleicher, MD – Mt. Sinai Toronto
- Allison Lee, MD – University of Pennsylvania

MPOG Obstetric Anesthesia Subcommittee is open to all individuals interested in improving obstetric care. Please reach out to Nicole if interested in joining.

Announcements

- Future Meeting Dates:
  - MPOG OB Subcommittee
    - December 4, 2024 at 1pm EST
    - February 26, 2025 at 1pm EST
  - MPOG Retreat
    - October 18th in Philadelphia, PA
    - Registration is now open

May Meeting Recap

- OB Subcommittee will now meet four times each year
- BP-04: Subcommittee recommended holding off on adding provider attribution at this time.
- TEMP-05: Hypothermia after Cesarean Delivery measure review. Voted to add 15 minutes to the measure end time.
- GA-03-OB: General Anesthesia for Cesarean Delivery after Epidural - Voted to exclude standalone cesarean deliveries (OBAT =2).

In the News

CONTENTS: ORIGINAL RESEARCH

Prophylactic Methylergonovine and Oxytocin Compared With Oxytocin Alone in Patients Undergoing Intrapartum Cesarean Birth

A Randomized Controlled Trial

Masse, Nicole MD; Dexter, Franklin MD, PhD; Wong, Cynthia A. MD

Author Information

Obstetrics & Gynecology 140(2):p 181-186, August 2022. | **DOI:** 10.1097/AOG.0000000000004857

Objective: To determine if prophylactic methylergonovine in addition to oxytocin reduces the need for additional uterotonics.

Design: Single Center, placebo-controlled, RCT of patients undergoing intrapartum cesarean birth.

Trial Treatment: Oxytocin 300 mL/min plus methylgernovine 0.2 mg (80 patients) vs. saline placebo (80 patients)

Primary outcome: Requirement for administration of additional uterotonic agents

Secondary outcome: Surgeon assessment of uterine tone, incidence of postpartum hemorrhage, quantitative blood loss, and blood transfusion.

Results: Participants receiving methylergonovine were 35% less likely (RR 0.4, 95% CI=0.2-0.6) to require additional uterotonics

- 39% more likely to have satisfactory uterine tone (RR 1.9, 95% CI=1.5-2.6)
- 24% less likely to experience postpartum hemorrhage (RR 0.6, 95% CI=0.4–0.9)
- 348 ml lower QBL (95% CI=124–572)
- 18% decreased frequency of blood transfusion (RR 0.2, 95% CI=0.1–0.6).

Azithromycin Data

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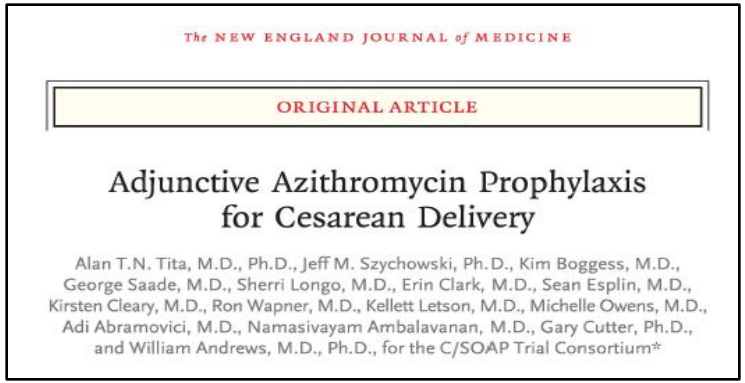
Background: New Azithromycin Measure


The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Adjunctive Azithromycin Prophylaxis for Cesarean Delivery

Alan T.N. Tita, M.D., Ph.D., Jeff M. Szychowski, Ph.D., Kim Boggess, M.D., George Saade, M.D., Sherri Longo, M.D., Erin Clark, M.D., Sean Esplin, M.D., Kirsten Cleary, M.D., Ron Wapner, M.D., Kellett Letson, M.D., Michelle Owens, M.D., Adi Abramovici, M.D., Namasivayam Ambalavanan, M.D., Gary Cutter, Ph.D., and William Andrews, M.D., Ph.D., for the C/SOAP Trial Consortium*

Inclusion criteria: Singleton pregnancy of gestation

- > 24 weeks undergoing intrapartum CD or CD > 4 hrs after ROM

Design: Multicenter (14 sites), DB, pragmatic, RCT – Pfizer donated study drug

Trial Treatment: 500 mg azithromycin vs saline placebo

Primary outcome: composite of endometritis, wound infection, or other infection within 6 weeks of delivery

Results:

- Primary outcome prevalence 6.1% (62/1019) in azithromycin arm vs. 12% (119/994) placebo arm; RR 0.51, 95%CI = [0.39, 0.68], P<0.001.
- No difference in neonatal outcomes

Azithromycin Study - 2023

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 MARCH 30, 2023 VOL. 388 NO. 13

Azithromycin to Prevent Sepsis or Death in Women Planning a Vaginal Birth

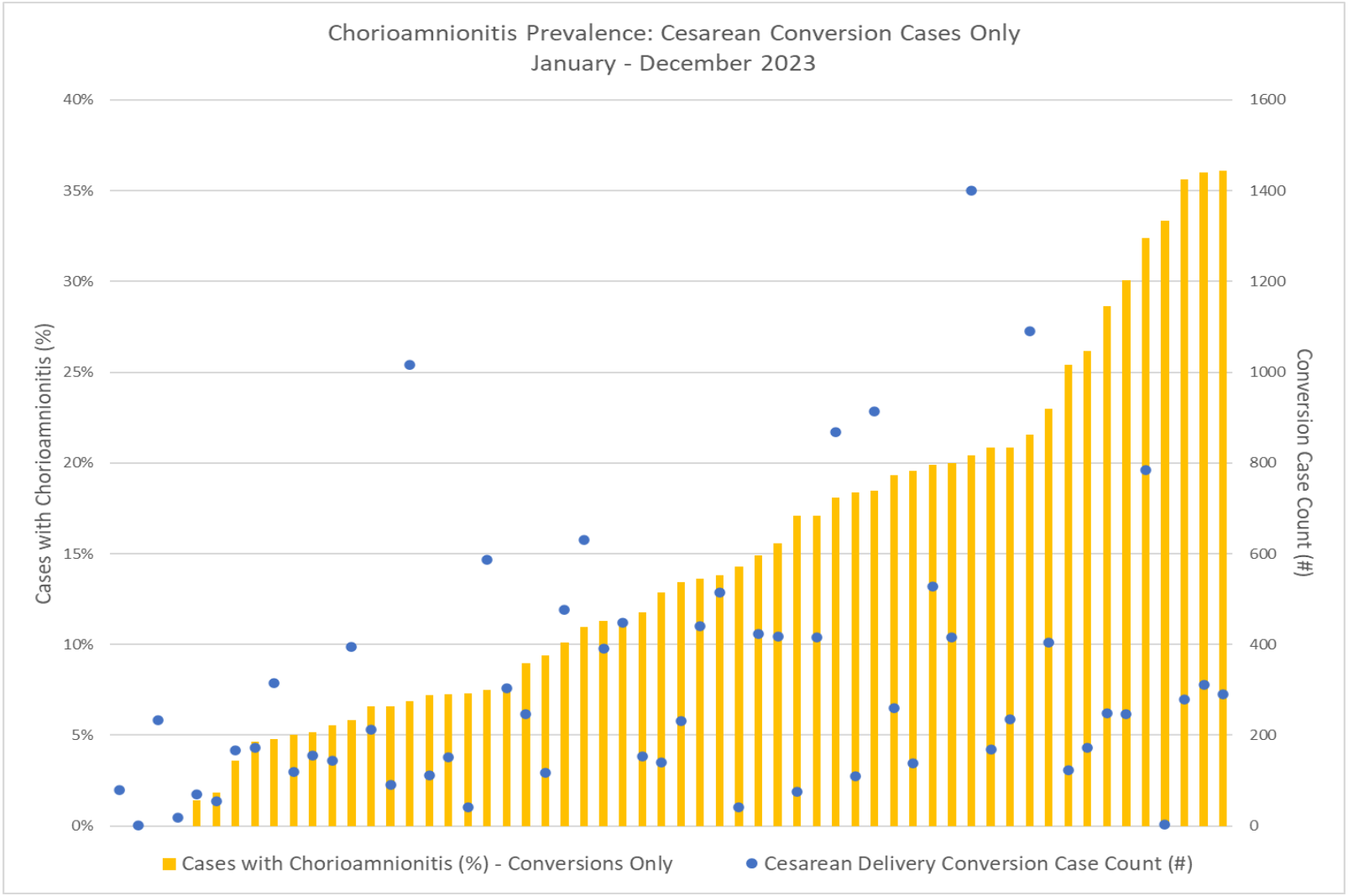
A.T.N. Tita, W.A. Carlo, E.M. McClure, M. Mwenechanya, E. Chomba, J.J. Hemingway-Foday, A. Kavi, M.C. Metgud, S.S. Goudar, R. Derman, A. Lokangaka, A. Tshefu, M. Bauserman, C. Bose, P. Shivkumar, M. Waikar, A. Patel, P.L. Hibberd, P. Nyongesa, F. Esamai, O.A. Ekhaguere, S. Bucher, S. Jessani, S.S. Tikmani, S. Saleem, R.L. Goldenberg, S.M. Billah, R. Lennox, R. Haque, W. Petri, L. Figueroa, M. Mazariegos, N.F. Krebs, J.L. Moore, T.L. Nolen, and M. Koso-Thomas, for the A-PLUS Trial Group*

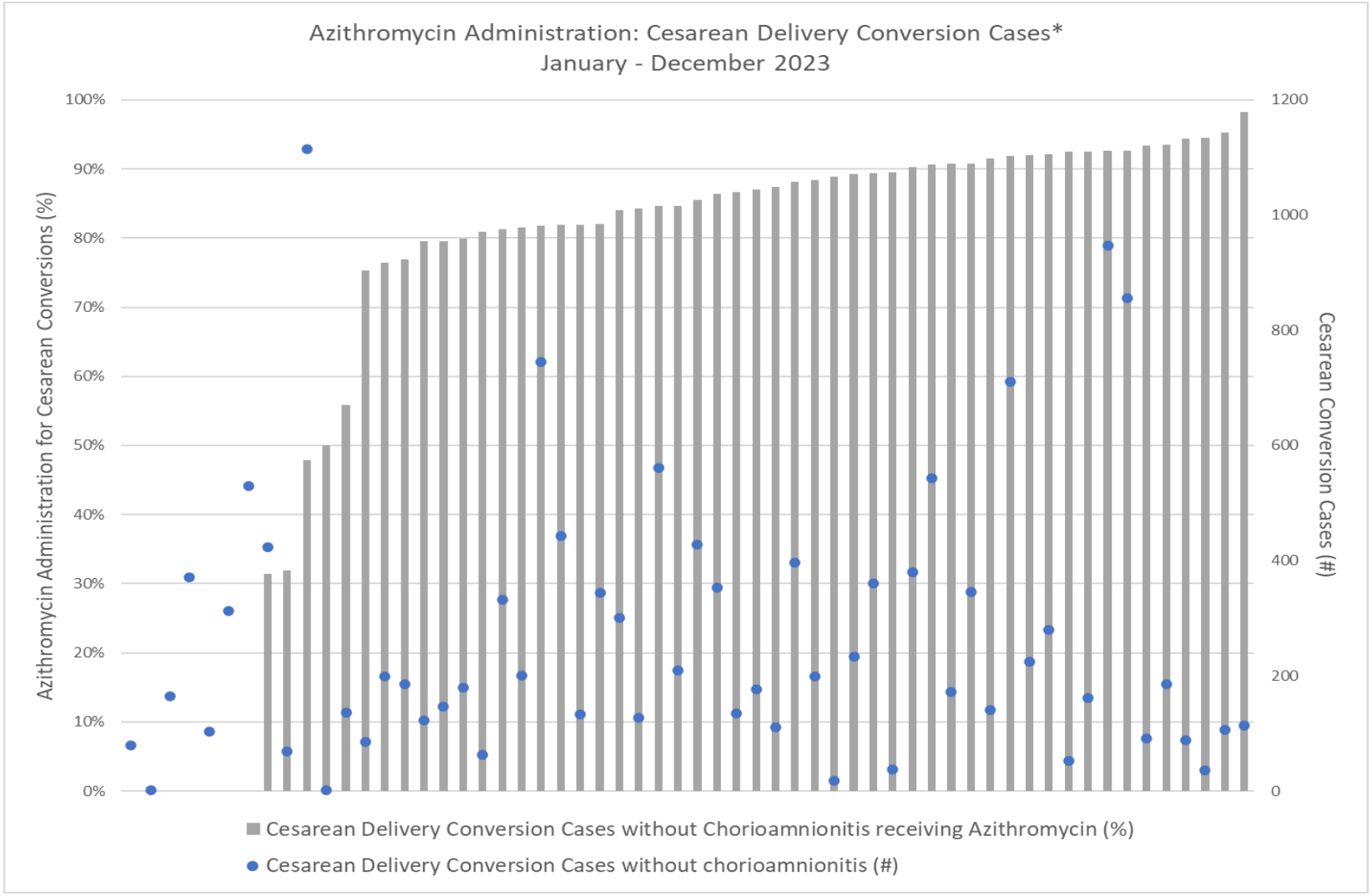
Inclusion Criteria: Women of 28-week gestational age or more planning SVD (2020-2022)
Design: Multicentered, multicounty, placebo controlled RCT conducted in low- and middle-income countries.
Trial Treatment: 2 g oral azithromycin or placebo. 14,590 women received azithromycin and 14,688 received placebo.
Maternal Primary Outcome: Composite of maternal sepsis or death within 6 weeks of delivery
Fetal Primary Outcome: Composite of still birth, neonatal death, or neonatal sepsis with 4 weeks of delivery
Results:

- Maternal primary outcome was less frequent in the azithromycin group (1.6% vs. 2.4%; RR=0.67, 95%CI=[0.56, 0.79], P<0.001).
- No difference in fetal primary outcome (10.5% vs. 10.3%; RR=1.02, 95% CI=[0.95, 1.09], P=0.56).
- Difference in primary maternal outcome driven mostly by sepsis.

Chorioamnionitis diagnosis in MPOG

- Proposed Azithromycin measure: *Percentage of unscheduled cesarean deliveries in which azithromycin was administered in the time period 60 minutes before incision through anesthesia end.*
- Discussed excluding cases with diagnosis of chorioamnionitis
  - Patients receive ampicillin and gentamycin + [metronidazole or clindamycin]
  - Effectiveness of adding azithromycin to this regimen has not been established
- Analyzed Chorioamnionitis using ICD.10 codes (O41.12x)
  - 21,367 cases from 2019-2023
  - Most common ICD.10 code: O41.1230 – Chorioamnionitis, Third trimester, not applicable or unspecified.


Chorioamnionitis Prevalence: Cesarean Conversion Cases Only
January - December 2023
Cases with Chorioamnionitis (%)
Conversion Case Count (#)
40%
35%
30%
25%
20%
15%
10%
5%
0%
1600
1400
1200
1000
800
600
400
200
0
Cases with Chorioamnionitis (%) - Conversions Only
Cesarean Delivery Conversion Case Count (#)


Azithromycin Administration: Cesarean Delivery Conversion Cases*
January - December 2023
Azithromycin Administration for Cesarean Conversions (%)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1200
1000
800
600
400
200
0
Cesarean Conversion Cases (#)
Cesarean Delivery Conversion Cases without Chorioamnionitis receiving Azithromycin (%)
Cesarean Delivery Conversion Cases without chorioamnionitis (#)

Proposed Measure: ABX-06-OB

Measure Description: ABX-06-OB *Percentage of unscheduled cesarean deliveries in which azithromycin was administered in the time period 60 minutes before surgical incision through anesthesia end.*

Measure Time Period: 120 minutes before surgical incision to Anes End. (Will flag if given too early).

Inclusions:

Cesarean delivery patients as determined by: Obstetric Anesthesia Type Phenotype

- 1- Conversion (Labor epidural and cesarean delivery charted under one case ID)
- 7- Conversion (cesarean delivery portion, labor epidural documented on another case ID)

Exclusions:

Obstetric Anesthesia Type phenotype:

- 0 - No,
- 2- Cesarean delivery without a preceding labor epidural
- 3- Labor Epidural,
- 4- Cesarean Hysterectomy
- 5- Obstetric Case Unable to Determine,
- 6- Conversion (labor epidural portion)
- 8- Conversion (cesarean hysterectomy portion)

Success Criteria: Non-elective cesarean patients who received azithromycin within the measure time period.

Vote to build New Antibiotic Measure

Azithromycin measure proposed: *Percentage of unscheduled cesarean deliveries in which azithromycin was administered in the time period 60 minutes before surgical incision through anesthesia end.*

Measure Time Period:
120 min before Surgical Incision to Anes End

Vote:

1. Build Azithromycin measure?
2. If yes, exclude Chorioamnionitis cases?
3. Should we exclude cases where no azithromycin is documented?

SOAP Centers of Excellence Measure Opportunities

Questions MPOG can currently address:

- What is the institution's overall general anesthesia rate (percentage) for cesarean delivery excluding complicated surgical cases with cesarean-hysterectomies for PAS? *
  - GA-01, already excludes cesarean hysterectomy procedures and PAS
  - Currently informational only, we could align with SOAP, set threshold at ≤ 5%
- What is the general anesthesia rate (percentage) for scheduled (e.g. planned/elective) cesarean delivery?
  - GA-01- OBAT enumeration 2
- Is there a quality assurance review of all cases requiring general anesthesia (irrespective of your institution's general anesthesia rate)?
  - GA-01 would identify cases for quality review
- What is the proportion of patients undergoing cesarean delivery that receive active warming?
  - Temp-01 would identify these
- What proportion of patients receive an adequate prophylactic antiemetic regimen?
  - PONV-05 would identify these

SOAP Centers of Excellence Measures

Questions MPOG could address with a little work:

- Identify for QA Review all "severe" hemorrhage cases
  - The OB subcommittee would need to agree on the definition for “severe hemorrhage”
  - SOAP suggests ≥ 4 units transfused
- Proportion of patients with at least one core body temperature monitored during cesarean delivery
  - Temp-02: % of patients receiving GA that have at least one core body temperature documented- could modify to include OB non-intubated patients and make separate OB measure.
- Proportion of patients with weight-based prophylactic antibiotic dosing
- Proportion of patients with appropriate antibiotic redosing
- Are block pauses/timeouts being performed prior to anesthesia procedures?
  - Are these timestamps being recorded?
- Proportion of patients administered multimodal analgesia during cesarean delivery (acetaminophen, ketorolac, ibuprofen)
  - PAIN-02: Multimodal Analgesia Cases -Percentage of adult patients receiving at least one non-opioid adjunct preoperatively or intraoperatively. (Modify existing measure to make separate OB measure)

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SOAP Centers of Excellence

SOAP COE Application Measures that may be supported with MPOG data:

- Proportion of spinal, CSE, DPE procedures performed with a pencil point needles of size 25-gauge or smaller. (This is not always charted well by MPOG sites)
- Proportion of patients administered an appropriate dose of intrathecal (100-150 mcg) or epidural morphine (2-3 mg)
- Proportion of postpartum tubal ligations procedures being performed within 24 hours of delivery
- Please provide an estimated breakdown of the utilization of neuraxial techniques, with the total equaling 100%.
  - We capture epidurals, CSE and Spinals- not DPE.

OB Phenotype Update

Statement of Problem

- MPOG currently does not have a phenotype for pregnancy.
- This hinders assessment of quality for non-obstetric surgery encounters.
- It is challenging to conduct meaningful outcomes research on a cohort without a phenotype.

Next steps

- Workgroup met in late July to spec out a phenotype.
- Will send cases to site representatives who are interested to help validate the phenotype. This requires reviewing cases to determine if phenotype is appropriately finding pregnant patients. If interested, please contact Nicole.
- Days before delivery phenotype

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THANK YOU!

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