

Resolved first-trimester subchorionic hematoma and risk of postpartum hemorrhage at delivery

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OBJECTIVE

- Data are limited on whether a first-trimester subchorionic hematoma (SCH) that later resolves is associated with postpartum hemorrhage (PPH).
- We aimed to evaluate whether resolved SCH is associated with an increased risk of PPH at delivery.

METHODS

Design & Population

- Retrospective cohort at a single academic center, 2016 – 2024
- Singleton pregnancies with SCH diagnosed on first-trimester transabdominal and transvaginal ultrasound and documented to have resolved in the second trimester

Comparison Group

- Normal first-trimester ultrasound, matched for parity, gestational age at ultrasound, and mode of delivery.

Outcomes

- **Primary:** PPH, defined as quantitative blood loss >1000 mL within 24 hours of delivery
- **Secondary:** Placental abruption; preterm birth; Maternal composite outcome (PPH, transfusion, intubation, mechanical ventilation, vasopressor use, or ICU admission) and Neonatal composite: 1-minute Apgar <7, arterial cord pH <7.0, NICU admission, or neonatal death

Analysis

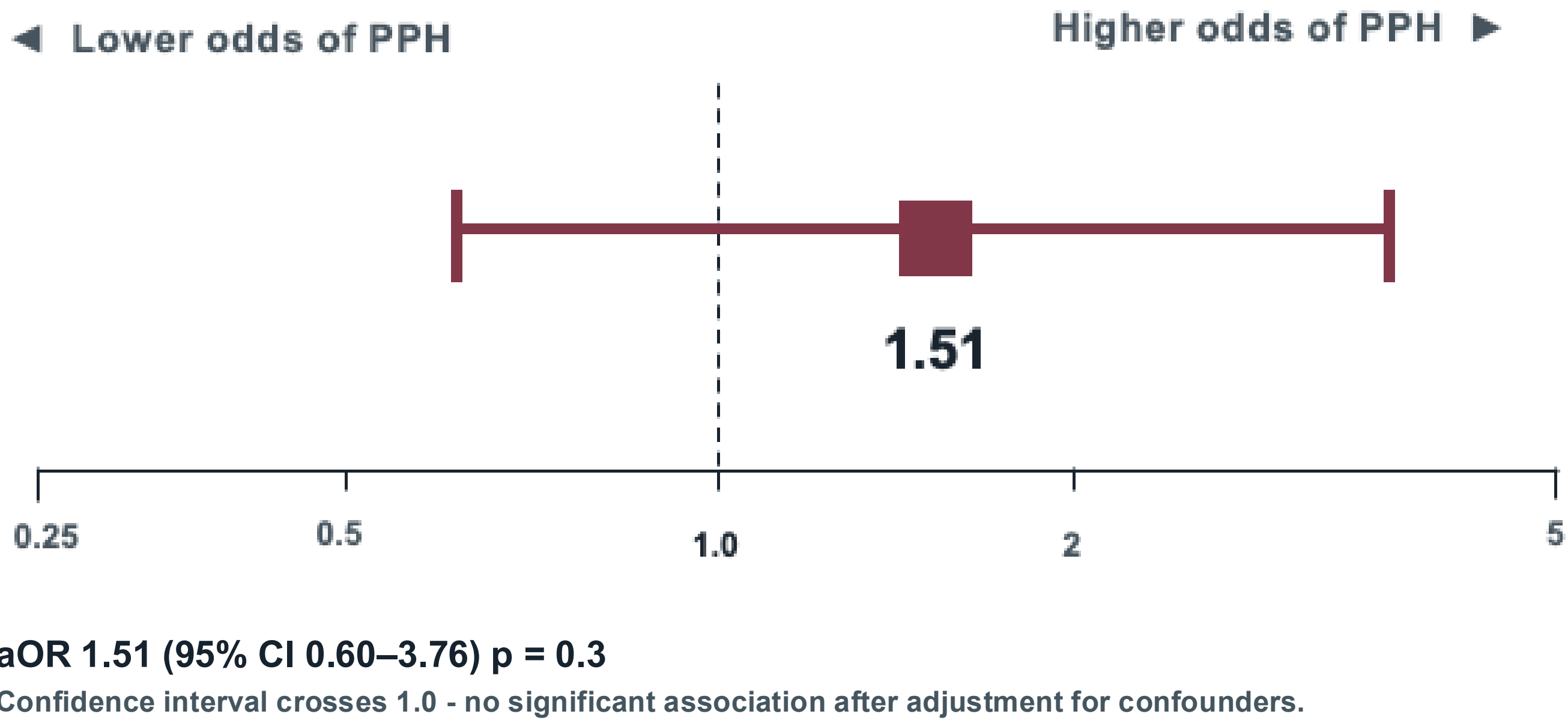
- Chi-square (categorical) and unpaired Student’s t-tests (continuous). Multivariable logistic regression to adjust for confounders.

RESULTS

155	155
Patients with resolved first-trimester SCH	Matched controls with normal first-trimester ultrasound
Symptomatic at SCH diagnosis	54 (34.8%)
Maternal & gestational characteristics	No difference
GA at delivery - SCH vs control	38.1 ± 0.2 vs 37.9 ± 0.2 wks (p = 0.5)

PRIMARY OUTCOME

POSTPARTUM HEMORRHAGE — ADJUSTED ODDS RATIO



SECONDARY OUTCOMES

OUTCOME	RESOLVED SCH vs CONTROL
Placental abruption	No significant difference
Preterm birth	No significant difference
Maternal composite PPH, transfusion, intubation, mechanical ventilation, vasopressors, ICU admission	No significant difference
Neonatal composite 1-min Apgar <7, cord pH <7.0, NICU admission, neonatal death	No significant difference

INTERPRETATION

- Resolution of a first-trimester SCH by the second trimester was not followed by a postpartum hemorrhage in this matched cohort.
- About one third of patients were symptomatic at diagnosis, yet delivery outcomes tracked with controls.
- These data may support routine pregnancy care for patients whose hematoma has resolved and provide reassurance to clinicians counseling patients whose first-trimester SCH has resolved.

CONCLUSION

A first-trimester subchorionic hematoma that resolves in the second trimester does not appear to be associated with an increased risk of postpartum hemorrhage or other adverse delivery outcomes.