

Effect of the COVID-19 Pandemic on Racial Disparities in Anesthetic Outcomes for Cesarean Deliveries at a Level IV Maternal Care Center



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Introduction

- A previous study demonstrated that patients of racial minority groups undergoing cesarean delivery (CD) are more likely to receive either general anesthesia (GA) or regional anesthesia with adjunct medication than their white counterparts¹
- Regional anesthesia (RA) is optimal, with additional adjunct anesthetic medication or general anesthesia indicating patient discomfort during delivery
- We hypothesized that disparities in anesthetic outcome would exist amongst Black and Hispanic patients, and and would be exacerbated during the COVID-19 pandemic

Methods

- Retrospective chart review of patients who underwent CD from Jan 1, 2017 to Dec 31, 2021
- Anesthetic outcomes: regional without adjunct medications better than regional with adjunct medications; conversion to general anesthesia considered the worst outcome
- Performed logistic regression with variables: race, whether the delivery was scheduled or unscheduled, and whether the CD occurred before or during the COVID-19 pandemic
- Races considered in regression: Black/African American, Hispanic, White (reference race)

Results

- 3800 patients underwent CD during this period
- 18.0% Black/African American, 29.2% Hispanic, 47.2% White/Caucasian

	White or Caucasian (N=1795)	Hispanic (N=1111)	<i>White or Caucasian vs Hispanic p value</i>	Black or African American (N=685)	<i>White or Caucasian vs Black or African American p value</i>
Regional only	1257 (70.0%)	750 (67.5%)	0.313	417 (60.9%)	<0.001*
Regional with adjunct medication	308 (17.2%)	233 (21.0%)		163 (23.8%)	
General anesthesia	230 (12.8%)	128 (11.5%)		105 (15.3%)	

Table: Multivariate logistic regression model for the odds of having a worse anesthetic outcome

Variable	Odds ratio	95% confidence interval	P value
Black or African American race	1.396	(1.164, 1.675)	<0.001*
Hispanic ethnicity	1.045	(0.889, 1.228)	0.121
Unscheduled cesarean delivery	2.754	(2.303, 3.292)	<0.001*
Cesarean delivery occurred during COVID-19 pandemic	1.320	(1.145, 1.522)	<0.001*

Discussion

- Black or African American patients had a significant disparity in anesthetic outcome during CD when controlling for whether the CD was scheduled and for whether it occurred during the COVID-19 pandemic
- Anesthetic outcomes further worsened during the pandemic for Black patients
- Hispanic patients had no significant anesthetic disparity, which Butwick et al also found¹

References

1. Butwick AJ et al. Racial and Ethnic Disparities in Mode of Anesthesia for Cesarean Delivery. Anesth Analg 2016;122:472-9.