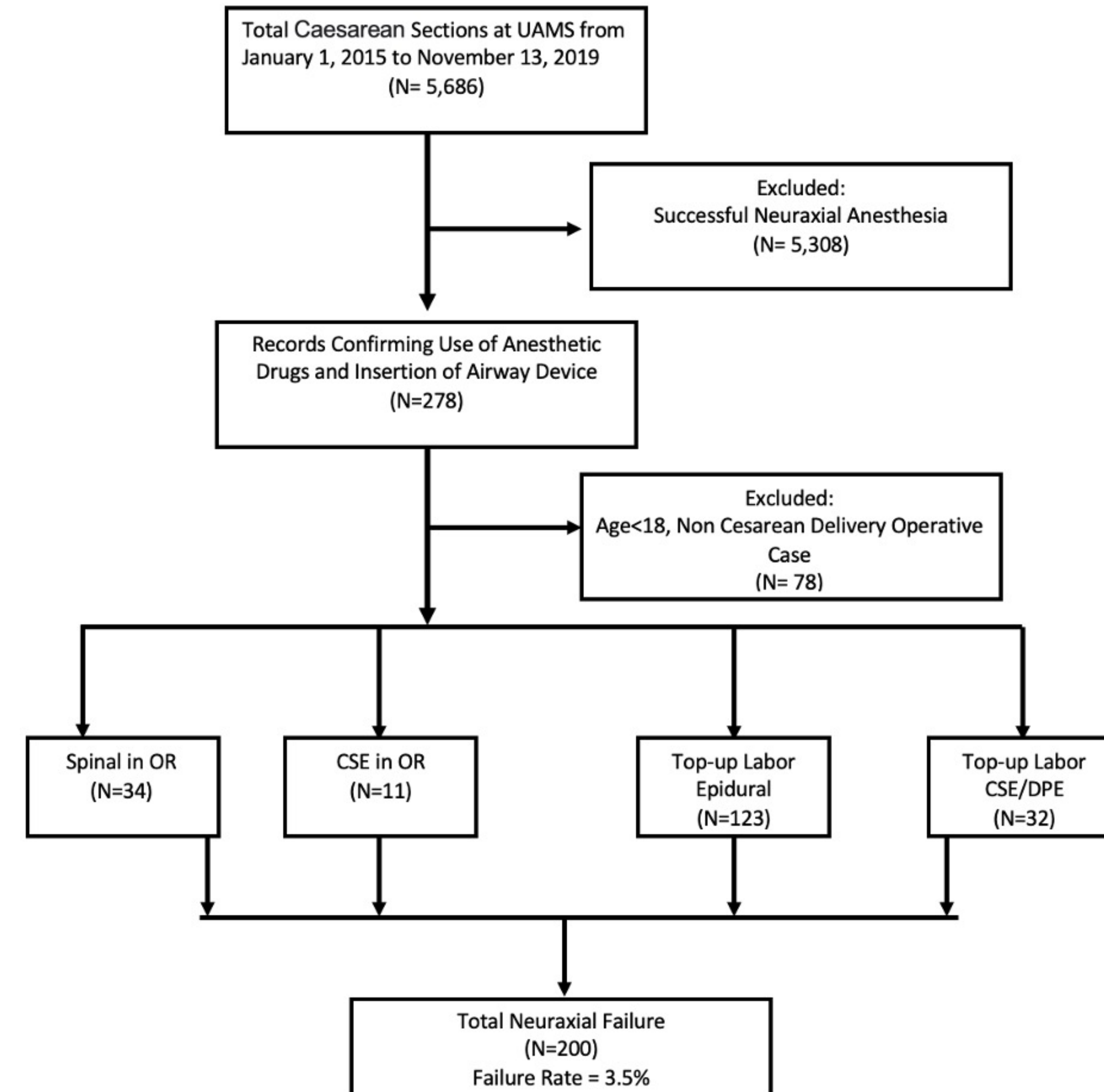


A Retrospective Study: Factors Associated with Conversion of Neuraxial Anesthesia to General Anesthesia for Cesarean Delivery

Nikhil Kamath, M.D., University of Arkansas for Medical Sciences
Shelby Webb, M.D., The University of Chicago Medical Center
Nadir El Sharawi, M.D., University of Arkansas for Medical Sciences

- The primary objective of this study is to determine the incidence of NA anesthetics converted to GA for CD at our institution.
- The secondary objective is to describe the population in which NA anesthesia failed.

Figure 1: Flowchart of Screen and Eligibility Criteria



OR=Operating Room; CSE=Combined Spinal Epidural; DPE=Dural Puncture Epidural

A Retrospective Study: Factors Associated with Conversion of Neuraxial Anesthesia to General Anesthesia for Cesarean Delivery

Nikhil Kamath, M.D., University of Arkansas of Medical Sciences
Shelby Webb, M.D., The University of Chicago Medical Center
Nadir El Sharawi, M.D., University of Arkansas for Medical Sciences

Table 1: Characteristics of Neuraxial Failures and primary Mode of Anesthesia

Types of failures	Spinal in OR (n=34)	CSE in OR (n=11)	Top-up Labor Epidural (n=123)	Top-up Labor CSE/DPE (n=32)
Total Neuraxial Performed	3557	1751	902	397
Failure Rate (%)	0.95%	0.63%	13.6%	8.1%
Urgency				
<i>Elective</i>	20 (60.6)	7 (63.6)	34 (27.6)	14 (43.8)
<i>Urgent</i>	9 (26.4)	2 (18.2)	12 (9.8)	1 (31.0)
<i>Emergent</i>	4 (11.8)	0 (0)	64 (52.0)	12 (37.5)
<i>Not Specified</i>	0 (0)	4 (36.3)	13 (10.5)	4 (12.5)
Time				
<i>Day Hours</i>	11 (45.8)	6 (54.5)	32 (26.0)	9 (28.1)
<i>Off Hours</i>	23 (67.6)	5 (45.5)	91 (73.9)	22 (68.8)
Ethnicity				
<i>White</i>	11 (32.4)	5 (45.5)	61 (49.6)	17 (53.1)
<i>Non-White</i>	23 (67.6)	6 (54.5)	62 (50.4)	15 (46.9)

Values within parenthesis indicate percentages
Off-hours= nights/weekends/holidays

A Retrospective Study: Factors Associated with Conversion of Neuraxial Anesthesia to General Anesthesia for Cesarean Delivery

Nikhil Kamath, M.D., University of Arkansas of Medical Sciences
Shelby Webb, M.D., The University of Chicago Medical Center
Nadir El Sharawi, M.D., University of Arkansas for Medical Sciences

Table 2: Comparison of Top-up Failure Characteristics with Statistical Analysis

Types of failures	Top-up Labor Epidural (n=123)	Top-up Labor CSE/DPE (n=32)	P value
Urgency			
<i>Elective (%)</i>	27.6	43.8	NS
<i>Urgent/Emergent (%)</i>	61.8	68.5	NS
Time			
<i>Day Hours (%)</i>	26.0	28.1	NS
<i>Off Hours (%)</i>	73.9	68.8	NS
Ethnicity			
<i>White (%)</i>	49.6	53.1	NS
<i>Non-White(%)</i>	50.4	46.9	NS
Delivery Method			
<i>ItCS (%)</i>	12.5	38.2	NS
<i>Other CS approach (%)</i>	87.5	61.8	<0.0000001

Values within parenthesis indicate percentages
ItCS= low transverse caesarean section; Other CS approach= classical caesarean section and low transverse caesarean section with T extension; Off-hours= nights/weekends/holidays
Failures without marked case urgency were excluded

- Our rate of NA failure necessitating conversion to GA for CD was 3.5%
- The incidence of NA failure for CD was less in women who received CSE/DPE for labor compared to traditional epidural analgesia