General versus regional anaesthesia for caesarean section indicated for acute foetal distress: A retrospective cohort study

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Background: There is no evidence exists as to the safest anaesthetic technique for the mother and foetus couple undergoing cesarian section (CS) for AFD. We aimed to compare general anaesthesia (GA) versus regional (spinal and epidural) anaesthesia in terms of their perioperative maternal and foetal outcomes.

Methods: We carried out a retrospective cohort study by reviewing the medical records of all women who underwent CS indicated for AFD between 2015 to 2018 at the Douala General Hospital, Cameroon. We sought to investigate the association between the type of anaesthesia used and maternal and foatal outcome. The threshold of statistical significance was set at 0.05.

Results and discussion: We enrolled the medical records of 117 pregnant women undergoing CS indicated for AFD with a mean age 30.5 ± 4.8 years of and mean gestational age of 40 weeks. Eighty-three (70.9%), 29 (24.8%) and 05 (4.3%) pregnant women underwent CS under SA, GA and EA respectively. Neonates delivered by CS under GA were more likely to have a significantly low APGAR score at both the 1st (RR = 1.93, p = 0.014) and third minute (RR = 2.52, p = 0.012) and to be resuscitated at birth (RR = 2.15, p = 0.015). Past CS, FHR pattern on CTG didn't affect these results in multivariate analysis. Adverse maternal outcomes are shown to be higher following SA compared to GA. Despite the limits of our findins, we provided another vision compared to other studies.

Conclusion: The study infers an association between CS performed for AFD under GA and foetal morbidity. This, however, failed to translate into a difference in perinatal mortality when comparing GA vs RA but emphasis on the need of anticipation for neonatl ressucitation.

Keywords: Acute foetal distress, Caesarean section, Anaesthesia, Neonatal, Maternal, Outcome.

Table 9 Association between anaesthesia technique and outcome variables in multivariate analysis

Exposure		ARR	CI	P-Value
APGAR at birth				
Type of anaesthesia	Regional	1	-	0016
	General	1.86	1.12-3.08	
	Yes	0.212	0.03-1.44	
APGAR 3rd minute				
Type of anaesthesia	Regional	1	-	0025
	General	2.33	1.11-4.88	
APGAR at 5th minute				
Type of anaesthesia	Regional	1	-	0124
	General	2.81	0.75-10.53	
Resuscitation				
Type of anaesthesia	Regional	1	-	0041
	General	1.90	1.02-3.51	
Neonatal Asphyxia				
Type of anaesthesia	Regional	1	-	0765
	General	1.08	0.63-1.88	

Biography

Metogo spouse Njoki is working as the chief of the critical care unit of the department of anaesthesiology and critical care of Douala General Hospital and also as a lecturer at the faculty of medicine and pharmacological sciences of Douala university of Cameroon. I am interested in the management of pain, locoreginal anaesthesia and life-threatening situations in critical care.

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