

Adult Attachment Style as a predictor of increased pain after cesarean delivery: a prospective observational study

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Introduction

- A patient's psychological characteristics may affect their pain.
- Adult Attachment Styles (AAS) refer to how a person "generally feels in close relationships" and is prevalent in the chronic pain literature.** AAS has been shown to correlate with patients' self-reported pain (1).
- Women with insecure attachment styles experience more pain during labour,** this relationship has not been studied in Cesarean Delivery (CD) patients (2).
- We hypothesized that women with an insecure attachment style will have higher pain scores as measured on a 0-10 Numeric Rating Scale (NRS) **24-hour after CD.**

Methods

- Sixty-five patients were recruited.** Attachment style was assessed by the Revised Adult Attachment Scale preoperatively.
- The primary outcome measure was the patient's ambulatory pain scores (NRS) at 24-hours.
- Secondary outcomes included:
 - Quality of recovery at 24-hours** as measured by the Obstetric Quality of Recovery-10 (ObsQoR-10) assessment tool;
 - Time-to-First opioid** analgesia request;
 - 24-hour opioid consumption;**
 - Time-to-First occurrence and number of treatments for nausea, vomiting, and pruritis.**

Results

	Secure n = 53	Non-secure n = 6	P-value
Primary Outcome			
24 hr ambulatory pain score, mean (SD)	4.8 (2.1)	4.2 (2.7)	0.52
Secondary Outcomes			
ObsQOR-10 score, mean (SD)	73.1 (16.3)	60.3 (20.5)	0.08
Time to first nausea or vomiting, hours, mean (SD)	6.7 (5.9)	17	NC
Number of patients treated for nausea or vomiting, n/N (%)	9/53 (17%)	0/6 (0%)	0.58
Time to first complain of pruritus, hours, mean (SD)	5.0 (4.7)	11.8 (5.5)	0.02*
Number of patients treated for pruritus, n/N (%)	10/53 (19%)	3/6 (50%)	0.11
Time to first opioid administration, hours, mean (SD)	6.5 (7.2)	11.6 (9.5)	0.22
24-hour opioid consumption, mg of morphine equivalents, mean (SD)	6.1 (10.2)	8.5 (13.7)	0.60

Figure 1: Primary and secondary outcomes among secure and non-secure attachment style groups. Values analyzed by t test (continuous variables) or Fisher's exact test (counts).

NC = not calculated

Discussion

- We had **53 patients in the secure attachment group and 6 patients in the non-secure attachment group**, 3 were lost to follow-up, and 2 had to be excluded. **Expected 1:2 ratio of secure to non-secure patients was not met (1:9 ratio in our population)**
- No significant difference in 24hr ambulatory pain scores** between attachment groups.
- There was a trend towards **worse recovery scores in the non-secure attachment group.** ObsQOR-10 scores were lower in the non-secure group.
- The non-secure attachment group also trended towards later reporting of their nausea, vomiting, pruritis, and requesting opioids later than the secure attachment group.**
- However, our **study was underpowered to detect statistical significance.** Further studies with greater number of patients would more clearly elucidate this relationship.

References

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- Costa Martins JM et al. Women's Attachment as a Predictor of Pain During Labour and Post-Delivery: a Prospective Observational Study. Acta Med Port. 2016;27(6):692. doi:10.20344/amp.4960