THE IMPACT OF REDUCED INTRAOPERATIVE MEAN ARTERIAL PRESSURE ON POSTOPERATIVE HEMORRHAGE IN BARIATRIC SURGERY

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Background:

Postoperative hemorrhage (POH) is a complication that occurs in 1.3-1.7% of bariatric surgeries. This study examined the effect of MAP on the development of POH.

Methods:

- Retrospective observational
- Case-control
- Adults who underwent bariatric surgery between 2015 - 2023.
- Intra-Op MAP (MAP in the last 10 and 30 min) in pts with POH.
- Cases matched with controls by gender, type of procedure, ASA.

Results:

- 204 pts: 102 with POH, 102 controls.
- Most common procedure:
  - RYGB: 48% (n=98)
  - SG: 37.7% (n=77)
- POH group had lower intra-Op MAP compared to controls:
  - Last 10 min: 92.4 vs 97.4 (p=0.014)
  - Last 30 min: 87.9 vs 91.9 (p=0.016)

Intra-Op MAP	Overall (n=204)	Cases (n=102)	Control (n=102)	P-value
MAP last 10 min	94.92 ± 14.63	92.41 ± 14.25	97.44 ± 14.64	**0.014**
MAP last 30 min	89.93 ± 11.94	87.93 ± 12.32	91.93 ± 11.26	**0.016**
MAP whole procedure	86.15 ± 10.1	85.03 ± 11.11	87.27 ± 8.89	0.113

Results:

- Intra-Op MAP <90 mmHg was associated with increased risk of POH:
  - Last 10 min (OR=2.067)
  - Last 30 min (OR=2.231)
  - Whole procedure (OR=1.834)

Intra-Op MAP <90 mm Hg	Cases (n=102)	Control (n=102)	OR (95% CI)
MAP last 10 min	46 (45.1)	29 (28.4)	**2.067 (1.156-3.695)**
MAP last 30 min	66 (64.7)	46 (45.1)	**2.231 (1.27-3.919)**
MAP whole procedure	73 (71.6)	59 (57.8)	**1.834 (1.024-3.285)**

Conclusion:

Patients with POH had lower intra-Op MAP during the last 10 and 30 minutes of surgery. An intra-Op MAP <90 mmHg was identified as a risk factor for POH.