

Hemodynamics of Cesarean Section in Super Obese Patients Comparing Phenylephrine and Estimated Blood Loss

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Background

- ▶ It has been proposed that administering phenylephrine induces additional blood loss via softening uterine tone during delivery (1)
- ▶ Purpose of this abstract is to ascertain if this theoretical concern is observed in super obese patients undergoing C-section deliveries when phenylephrine was administered

Materials and Methods

- ▶ Conducted a retrospective review of patient charts from a single institution, IRB approved
- ▶ Patients were aged between 18-48 with a BMI ≥ 50.0 kg/m² with a documented anesthesia record
- ▶ Reviewed a total of 283 patient charts that met study inclusion criteria and delivered via C-section
- ▶ 11 charts were excluded due to unreported estimated blood loss (EBL) and 64 charts were not included in scatter plot analysis due to no phenylephrine use reported

1. Shen, Yao-Hua et al. "Prophylactic Phenylephrine Increases the Dose Requirement of Oxytocin to Treat Uterine Atony During Cesarean Delivery: A Double-Blinded, Single-Center, Randomized and Placebo-Controlled Trial." *Frontiers in pharmacology* vol. 12 720906. 20 Oct. 2021, doi:10.3389/fphar.2021.720906

Discussion:

- ▶ No predictive relationship between phenylephrine given and EBL
- ▶ $R^2 = 0.0184$
- ▶ Average EBL for deliveries with no phenylephrine 1005.2 ml vs. with 940.6 ml ($P=0.19$)
- ▶ No significant difference in blood loss with and without phenylephrine
- ▶ The high variability of subjectively reported EBL may be responsible for lack of correlation

