

Case of a successful awake Caesarean section using epidural anesthesia in a patient with Class 3 Obesity and moderate pulmonary hypertension

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Introduction

- Pulmonary hypertension, obesity, and pre-eclampsia present challenges to the safe care of a parturient; those challenges increase when all three are combined.
- Patients with super morbid obesity (BMI > 60 kg/m²) represent **2%** of all pregnancies, and have a **>95%** chance of having obstructive sleep apnea (OSA).¹ Severe OSA can lead to or worsen pulmonary hypertension (PH).
- PH in pregnancy carries a mortality rate ranging from **3-43%** depending upon the severity and etiology of PH.¹⁻² PH is considered a World Health Organization Class IV cardiac lesion, meaning pregnancy is contraindicated and termination is usually recommended.³
- Nevertheless, many of these patients wish to carry their pregnancy to term. In order to accomplish this, careful coordination must be executed by critical care, maternal-fetal medicine, and obstetric anesthesia teams to provide safe, quality care.

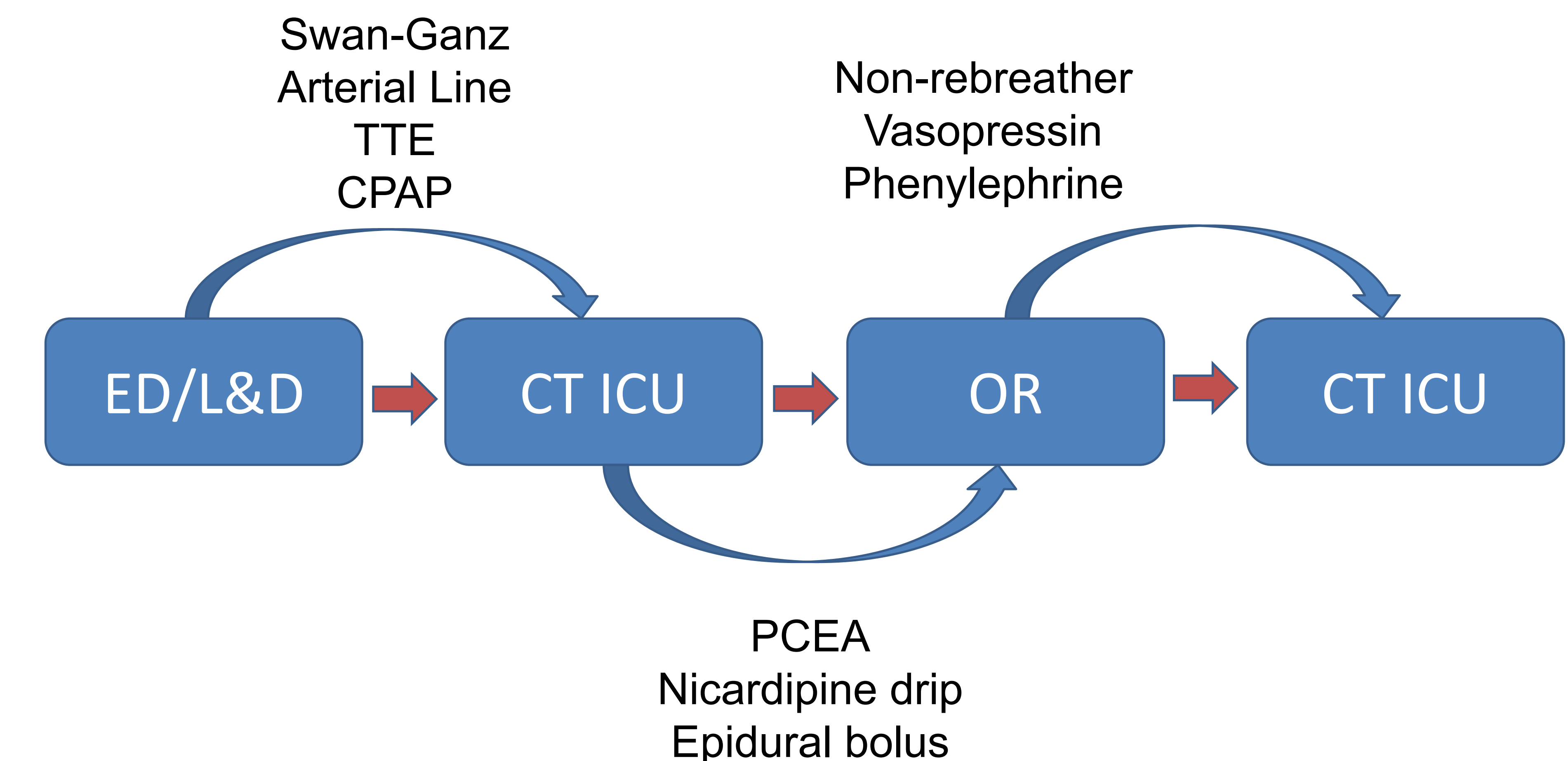
Case Description

Patient

32 yo G5P2 Female

PMHx

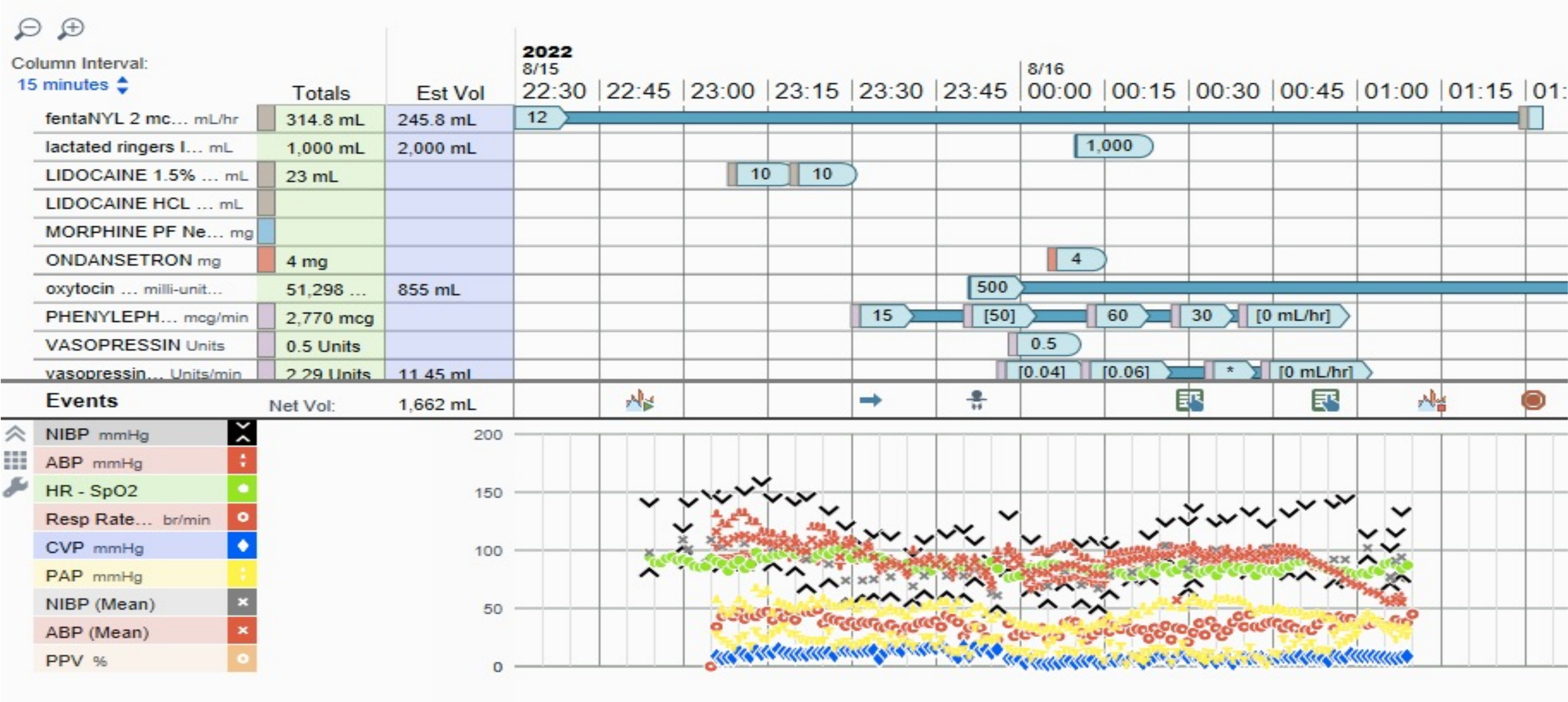
Chronic HTN, 190 kg (BMI: 75 kg/m²), moderate pulmonary HTN (2/2 OSA/prior COVID, on 4L/min O₂)



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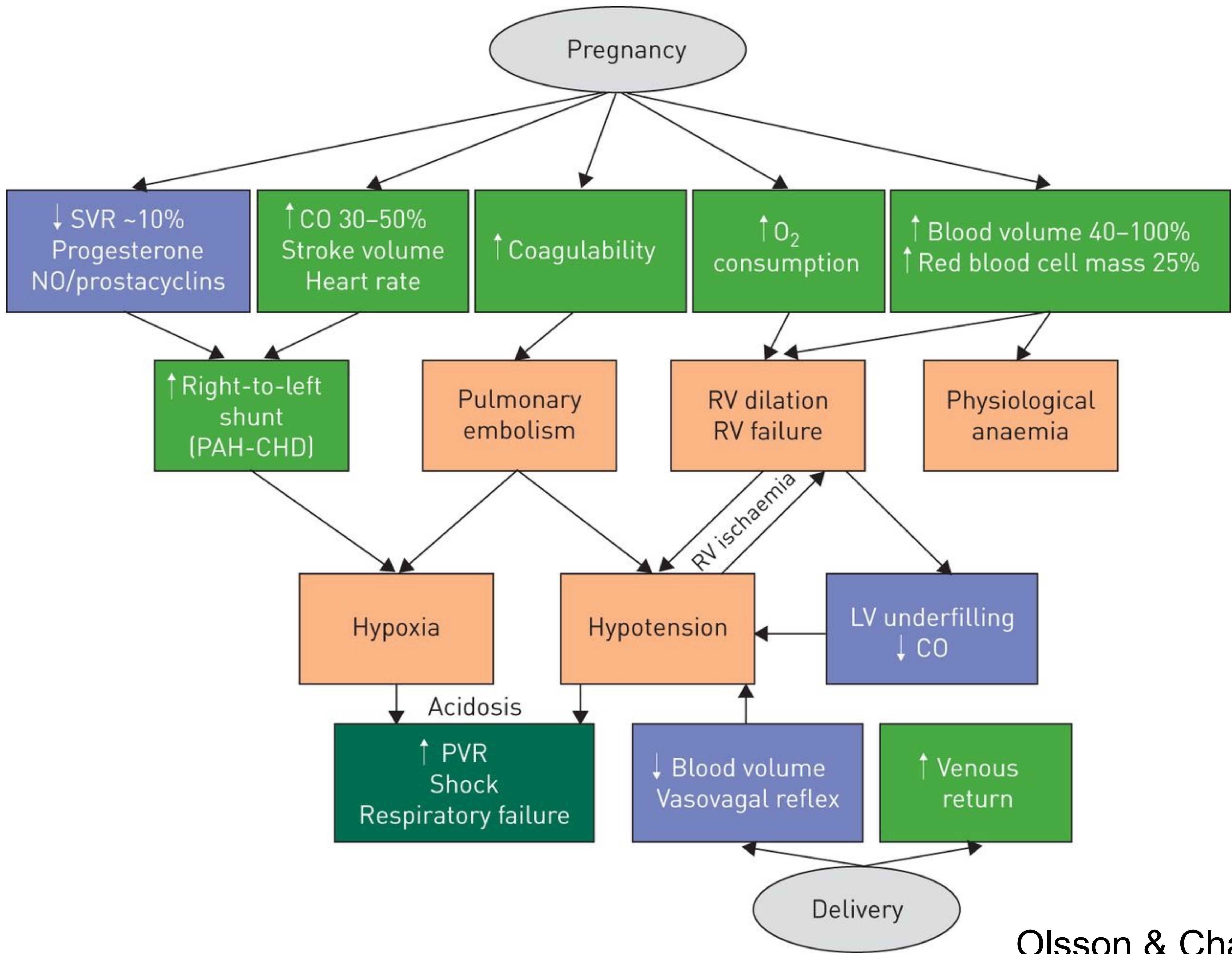
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Olsson & Channick, 2016

Conclusion

Awake Caesarean sections in a parturient with severe morbid obesity and moderate pulmonary hypertension can be successfully completed with epidural anesthesia and complex coordination of care.

References

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- (3). Elkayam U, Goland S, Pieper PG, Silversides CK. High-risk cardiac disease in pregnancy, Part I. *J Am Coll Cardiol.* 2016; 68(4): 396-410.
- (4). Olsson KM, Channick R. Pregnancy in pulmonary arterial hypertension. *European Respiratory Review* 2016 25: 431-437