

# The obstetric critical care patient: a single centre retrospective cohort study

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## Introduction:

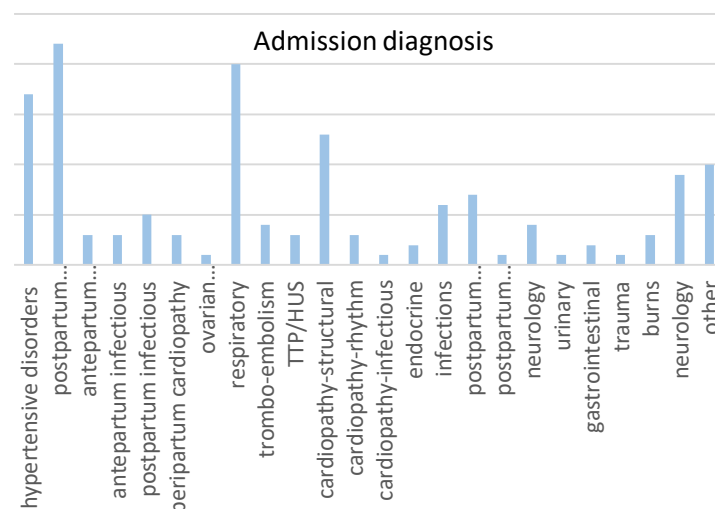
Obstetric admissions to the intensive care unit remain a challenging event to intensive care specialists. These are often urgent admissions due to diseases unique to the pregnant or postpartum state. In addition, we need to have special attention to the altered maternal physiology that occurs during pregnancy and take into account the foetal considerations [1,2]. Therefore, with this study, we aim to describe the current obstetric ICU population regarding type of admission, ICU admission diagnosis, characteristics of the ICU stay and ICU outcome.

## Methods:

We performed a retrospective cohort study of all the obstetric patients admitted to the medical, cardiac and surgical ICU at UZ Leuven, a Belgian tertiary hospital from 1/12/2012 to 01/10/2022. Patient demographic characteristics, ICU and hospital length of stay,<sup>25</sup> type of admission,<sup>20</sup> mechanical ventilation,<sup>15</sup> use of inotropes, need for transfusion, need for renal replacement therapy and ICU outcome were studied.

## Results:

Patient characteristics		ICU STAY	
total study population, <i>n</i>	144	ICU LOS <i>days, median</i>	2
maternal age, years, mean +/- SD	31.33 +/- 5.57	HOSPITAL LOS <i>days, median</i>	8
BMI, kg/m <sup>2</sup> , mean +/-SD	27.17 +/- 4.96	MECHANICAL VENTILATION, <i>n</i>	Total 65
gravity, <i>n</i> (%)	primigravida	Invasive	46
	multigravida	Non-invasive	19
timing of admission, <i>n</i> (%)	1 <sup>st</sup> trimester	INOTROPIC, <i>n</i>	38
	2 <sup>nd</sup> trimester	TRANSFUSION, <i>n</i>	47
	3 <sup>rd</sup> trimester	RENAL REPLACEMENT THERAPY, <i>n</i>	9
	postpartum	ICU OUTCOME ALIVE, <i>n</i>	138
	After TOP		
	5 (3.5%)		



## Conclusion:

The median ICU length of stay is short. Postpartum hemorrhage, hypertensive disorders and respiratory failure are the most common reasons for ICU admission and a lot of these patients require mechanical ventilation and transfusion.

### References:

1. Griffin KM, Oxford-Horrey C, Bourjeily G. Obstetric Disorders and Critical illness. Clin Chest Med. 2022 Sep;43(3):471-88.
2. Guntupalli KK, Hall N, Karnad DR, Bandi V, Belford M. Critical illness in Pregnancy. Chest. 2015 Oct;148(4):1093-104

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