472348 - MATERNAL AND NEONATAL OUTCOMES IN OBESE PARTURIENTS

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Introduction: Obesity is increasing in prevalence among pregnant women in North America.^{1,2} Obesity worsens maternal morbidity with a greater incidence of hypertension, diabetes and cesarean section. This study examined the maternal and neonatal risks in obese compared to parturients with a normal body weight.

Methods: Following ethics committee approval, data was prospectively collected on all obese parturients with a BMI >35 who delivered at our hospital for the period from February-August 2007. These patients were compared to an equal number of normal weight patients during the same interval. Patients charts were reviewed for complications that developed within 6 week postpartum. Maternal outcome data are shown for all patients in each group. Newborn data are included for babies born after 37 weeks gestation excluding any multiples. Data listed as mean.

Results: There were a total of 580 parturients per group (96.1% data collection rate). The overall incidence of morbid obesity was 23%. The average BMI was 40 and 28.6 in the obese and control groups respectively. The percentage of primiparous patients was the same in each group. In the obese parturients, there was a greater incidence of hypertension, diabetes, cesarean section rate, longer intraoperative times and more frequent readmissions. Surgical site infections were more frequent in the obese mothers. Neonatal outcomes were compared for infants >37 weeks gestation excluding multiple births (496 neonates in the obese group and 520 in the control group). The neonates in the obese group had higher birth weights and lower apgar scores at 1 minute, were more likely to require admission to a special care unit, require intubation for respiratory failure and develop respiratory complications.

Discussion: Obese parturients and their neonates are at greater risks in the peripartum and newborn period challenging our ability to care for them safely. The risks to this patient population and the need for high-level care appears clear. Further studies are needed to determine the safest way to provide care for these patients.

References: 1. Ob & Gyn 2005;106:1357-1364 2. Am J Obst Gynecol 2005;193:1994-1998

MATERNAL OUTCOME	Control	Obese	p-value	NEONATAL OUTCOME	Control	Obese	p-value
BMI	28.6	40.0	0.0001	Birth Weight (g)	3496	3733	0.0001
Antepartum Hypertension	5.3%	15.2%	0.001	Apgar Score, 1 min	8.3	8.0	0.04
Antepartum Diabetes	1.7%	12.6%	0.001	Apgar Score, 5 min	8.9	8.8	NS
Cesarean Delivery	15.9%	26.4%	0.001	Cord Gas Arterial pH	7.24	7.25	NS
Cesarean OR Time (min)	56.4	65.2	0.0005	Special Care Unit Admission	5.0%	9.3%	0.01
Readmission Rate	1.4%	4.1%	0.01	Intubation	0.2%	1.2%	0.05
Surgical Site Infections	3.3%	13.7%	0.01	Respiratory Complications	2.5%	6.0%	0.01