

**TITLE:** MORBID OBESITY IN THE PARTURIENT PATIENTS  
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We aimed to examine the prevalence of complications in the morbidly obese parturients weighing more than 150kg.

After institutional approval records of women who delivered during the year 1989 were analysed and those weighing more than 150kg. were separated (GI). Because they all had Cesarean delivery (CD) they were matched with records of the patients who had the next CD. Data was abstracted about demographic variables, associated disease, parturition risk factors, status of newborn, anesthetic and operative considerations and post operative course and complications.

6118 deliveries were conducted during the study period. 13 patients were found to weigh more than 150kg, the age, height, parity, gravida and gestational age were equal in GI and GII but the difference in the weight  $159 \pm 5$ kg in GI and  $65 \pm 1$ kg in GII was significant ( $P < 0.010$ ). There was no associated disease in GII. In GI 7 patients had PIH (53.38%), 4 chronic hypertension (30.78%), 2 diabetes (15.38%) and one asthma (7.6%). The indication for CD was CPD in 8 patients in GI and 10 in GII, fetal distress in 5 patients in GI and in 2 patients in GII and breech in 1 patient in GII. Two patients had prior CD in GI and none in GII. Epidural spinal or general anesthesia was used in 8, 3 and 2 patients in GI and in 10, 2 and 1 patient in GII consecutively. In GI intra-

arterial catheters were used in 8 patients, CVP catheters in 5 and swan ganz catheter in one and none in GII. The admission, preinduction and post operative systolic diastolic pressures and pulse rate in GI were significantly higher than in GII ( $P < 0.05$ ); while intra-operatively in the 8 patients who received regional in GI and the 10 patients in GII there was a significant drop in the systolic and diastolic blood pressure but not in the pulse rate. The percent change in the blood pressure was not statistically significant between GI and GII. There was no significant difference between GI and GII in the estimated blood loss, fluid infused, EBL urine output, weight of the neonate or apgar scores at 1 and 5 minutes. Surgical incision to delivery in minutes in GI =  $16 \pm 8$  and in GII =  $6 \pm 8$  ( $P < 0.001$ ). Uterine incision to delivery in minutes in GI =  $4.5 \pm 2.4$  and in GII  $2 \pm 0.9$  ( $P < 0.002$ ). Cord pH in GI =  $7.24 \pm 0.06$  and in GII  $7.3 \pm 0.7$  ( $P < 0.018$ ). Days of post operative hospital stay in GI =  $7.5 \pm 3.6$  and in GII  $4.92 \pm 0.76$ , ( $P < 0.02$ ). There was no incidence of post partum wound or pulmonary infection, hemorrhage, fever, or other complications in GI or GII patients.

The morbidly obese parturients differed from the other population in that they had a high incidence of associated disease; 100% CD, compromised airway, increased incision to delivery and uterine incision to delivery intervals that may account for the decreased in cord pH and normal apgar scores; and increase post operative obstetric hospital stay. Adequate monitoring and appropriate obstetric and anesthesia care resulted in good maternal and neonatal outcome and no complication.

## A1001

**TITLE:** INTRATHECAL NARCOTICS FOR LABOR:  
 EFFICACY OF MORPHINE 0.5mg, 0.75mg,  
 1.0mg, COMBINED WITH FENTANYL  
 25 MICROGRAMS  
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**Introduction:** Intrathecal narcotics can be effectively used to provide analgesia for the first stage of labor. A previous study using fentanyl 25 micrograms combined with morphine 0.25mg concluded that effective labor analgesia could be rapidly achieved<sup>1</sup>. Pruritus, nausea and vomiting were common side effects. Therefore, we investigated the duration of analgesia of three doses of morphine (0.5mg, 0.75mg, and 1.0mg), mixed with fentanyl 25 micrograms, following a naltrexone (5mg) premedication.

**Methods:** Term primigravida and multigravida ASA Class I or II patients were included in the study after informed consent was obtained. Following routine skin preparation, the subarachnoid space was located with a 3 $\frac{1}{2}$ " 22 to 25 gauge spinal needle. Premixed fentanyl and morphine, in the above-mentioned doses, were injected. An epidural catheter was placed at the same level. Patients were asked to assess their pain on a pain scale (0-10). The assessment was performed according to the following

schedule: 1) Prior to the administration of spinal narcotics, 2) During the first two contractions, two minutes after narcotics were injected, 3) During maximum pain, an epidural dosing was requested by the patient. Naltrexone 5mg orally was given immediately after the spinal injection. Patients were requested to report itching, nausea and vomiting (none, mild, moderate or severe). An analysis of variance ANOVA test was performed on the three groups to test for the significance of mean difference. (P value = 0.12)

### Results:

DOSE	N	DURATION (MEAN)(Min)	S.D.	MILD PRURITUS (Severe)	NAUSEA/ VOMITING	POPH/NEEDLE SIZE
0.5mg*	(8)	162.5	95.9	6 (1)	1	1/#22
0.75mg	(10)	98.4	48.6	10	-	2/#25
1.0mg	(12)	143.9	55.4	8	-	1/#25

\*One patient has been excluded from this group, as the duration of analgesia was 420 min.  
 The mean differences were judged to be non-significant between 0.5 and 1.0 mg.

**Discussion:** It can be concluded from the above data that increasing the dose of intrathecal morphine does not significantly increase the duration of analgesia. Further investigation is required to determine if a dosage less than 0.5mg morphine provides good labor analgesia of an adequate duration with Naltrexone premedication.

### References:

1. Leighton BL, et al, 1989. *Anesth Analg* 69:122-5.