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**DOES EPIDURAL PCA ANALGESIA FOR POST OPERATIVE PAIN INCREASE THE INCIDENCE OF HYPERPYREXIA IN POST C/S PATIENTS**

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**Introduction:** The use of epidural analgesia during labor and delivery has been implicated in causing maternal intrapartum fever(1). We speculate that the maternal intrapartum fever during labor is caused by imbalance between increased heat productin by pyrogens from chorioamnionitis and by uterine muscles and striatal muscle activity and heat dissipation caused by diminished sweating(2)due to sympathetic block. We speculate that imbalance between heat production from pyrogens after surgery and reduced heat dissipation from epidural sympathetic block would increase the incidence of hyperpyrexia in patients post C/S. We study whether epidural PCA analgesia post C/S increases the incidence of hyperpyrexia.

**Methods:** Following IRB approval and informed consent, 145 patients post C/S were included. GI (n=79) includes patients who received epidural-PCA analgesia for 48 hrs. GII (n=66) includes patients who received IV-PCA morphine for 48 hrs. Patients in GI received epidural-PCA ropivacaine 0.025%, fentanyl 3µg/ml, and epinephrine 1µg/ml at an infusion rate of 10-25 ml/hr, PCA dose 4 ml, lockout time 10 min for 48 hrs. Patients in GII received IV-PCA morphine sulphate 0-3 ml/hr, PCA dose 1-3 ml, lockout time 10 min. All patients were allowed to receive PO acetaminophen 500 mg and/or ibuprophen 400 mg every 4 hrs for uterine cramps and fever. Data were expressed as mean ±SD, p less than 0.05.

**Conclusion:** Epidural PCA analgesia for post C/S pain increases the incidence of patient hyperpyrexia and antibiotic treatment.

1. Lieberman et al. Pediatrics 99:415-9, 1997 2. Fusi et al. Lancet I 1250-2, 1998

Results:	Group I n=79 (%)	Group II n=66 (%)
Age (years)	29.0±6.1*	31.3±6.5
Weight (kg)	184.3±43.9	171.6±41.4
Height (cm)	160±10.0	160±10.0
Breastfeeding	56(71)	40(60)
GBS Status	12(15)	10(15)
First Post C/S Temp (F)	98.9±1.0**	98.3±0.9
Max Post C/S Temp (F)	100.2±0.8***	99.4±0.9
#Pts Max Temp >100.6F	23(32)†	6(9)
I.V. Antibiotics	64(70)††	37(56)
P.O. Acetaminophen	13(16)	6(9)
Acetaminophen Dose (mg)	541.7±320.0	591.7±493.1
P.O. Ibuprophen	23(29)	5(8)
Ibuprophen Dose (mg)	1221.7±1241.7†††	1680.0±1589.8
*I <II, p <0.03, **I>II, p<0.0003, ***I>II, p<0.00001, †I>II, p<0.002, ††I>II, p<0.005, †††I <II, p<0.05		