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**ROPIVACAINE 0.1% IS MORE POTENT THAN BUPIVACAINE 0.06% FOR LABOR EPIDURAL ANALGESIA**

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Recent studies suggest that the potency of Ropivacaine(R) is 60% of the potency of Bupivacaine(B),(1)(2). The current study compares the efficacy of the labor epidural analgesia produced by 0.1%(R) and 0.06%(B), two possible equipotent concentrations.

Methods: In a double-blinded, randomized, prospective study, 104 healthy multigravid women were given either(R) or (B). The (R) group received 8 ml of 0.2%(R)+ 100 microgram Fentanyl followed by continuous epidural infusion(CEI) of (R) 0.1% + Fentanyl 2 microgram/ml at 12ml/hr. The (B) group received 8 ml of(B) 0.125% + Fentanyl 100 microgram followed by CEI of (B) 0.06% + Fentanyl 2 microgram/ml at 12 ml/hr. Visual Analog pain score (VAS) and the degree of motor block (Bromage Scoe, BS) were recorded every hour until complete cervical dilation. Data is expressed as mean +/- SD, except when noted otherwise, and analyzed using t-test, Chi-Square or Mann-Whitney U test at p<0.05.

Results: Shown in the table.

(1) Polly L. Anesthesiology 1999;90:944-950 (2) Capogna G Br. J. Anesthesia 1999; 82:371-73

	Bupivacaine	Ropivacaine	P
Age	31.2+/-1.1	31.8+/-4.9	0.5
Height(cm)	164.0+/-6.2	162.0+/-5.8	0.051
Weight(Kg)	79.1+/-15	77.6+/-14.4	0.6
Gravidity	3.2+/-1.1	3.1+/-1.3	0.6
VAS(baseline, median)	70	70	0.5
VAS(complete cervical dilation)	30	20	0.005
BS=4 %	98	98	0.9
Gestational age (Weeks)	39.15+/-0.9	39.2+/-0.9	0.7

Image 29

