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**USE OF IUPC TO EVALUATE THE EFFECT OF CSE ON UTERINE CONTRACTION PATTERNS** Sullivan, J.T.; Scavone, B.M.; Wong, C.A.; Avram, M.J. *Anesthesiology, Northwestern University, Chicago, IL*

**Introduction:** Fetal bradycardia following combined spinal-epidural labor analgesia (CSE) is poorly understood. Proposed mechanisms include uterine hypertonus. Intrauterine pressure catheters (IUPC) allow precise measurement of uterine pressures after CSE. **Methods:** After IRB approval, a retrospective observational study was conducted on healthy parturients who had IUPCs placed prior to CSE. Patients were selected from an obstetrical anesthesia database from 11/1/99 to 12/31/00 for all parturients managed by 2 obstetricians who commonly place IUPCs. Electronic charts and fetal strips of 53 patients were reviewed and a subset of 8 who had uncomplicated spontaneous or induced labor and received IUPC prior to CSE (bupivacaine 2.5mg/fentanyl 25u) were analyzed. Uterine basal and peak pressures, contraction frequency and duration were noted during six 10 min periods beginning 30 min prior to and ending 30 min after CSE. Data from 4 patients who had no change in oxytocin infusion rate (Grp1) and 4 whose oxytocin infusion rates were increased (Grp2) were analyzed separately. Data were analyzed using ANOVA with Bonferroni correction ( $P < 0.05$  significant). **Results:** See Table **Conclusion:** In this preliminary study there was no evidence of change in uterine contraction pattern after CSE regardless of oxytocin administration. **Reference:** Kahn L. *Reg Anesth Pain Med* 1998;23:111-2

Grp 1	30-20	20-10	10-0	0-10	10-20	20-30
	min	min	min	min	min	min
	before	before	before	after	after	after
Basal Uterine P (mmHg)	17.5 (6.5)	18.8 (6.3)	23.8 (10.3)	18.8 (7.5)	18.8 (4.8)	20.0 (4.1)
Peak Uterine P (mmHg)	52.5 (6.6)	51.9 (6.4)	51.1 (9.1)	50.8 (13.2)	49.8 (18.1)	54.1 (10.3)
# Contractions	4.3 (1.0)	4.0 (0.8)	4.3 (1.0)	4.0 (0.8)	4.0 (0.8)	4.0 (0)
Contraction Duration(s)	81.2 (21.5)	73.5 (10.2)	79.3 (10.2)	71.9 (3.8)	73.8 (10.5)	73.8 (7.2)
Grp 2	30-20	20-10	10-0	0-10	10-20	20-30
	min	min	min	min	min	min
	before	before	before	after	after	after
	20.0 (5.0)	17.5 (5.0)	22.5 (6.5)	22.5 (6.5)	20.0 (5.8)	21.3 (4.8)
	32.0 (6.9)	37.7 (10.4)	37.9 (9.1)	37.4 (8.6)	34.9 (8.1)	34.8 (11.2)
	4.3 (1.9)	4.0 (1.2)	4.5 (1.3)	4.0 (0.8)	4.0 (0.8)	4.0 (0.8)
Mean (S.D.)	86.2 (25.9)	86.2 (10.7)	83.1 (11.6)	81.1 (15.6)	81.3 (6.6)	85.0 (15.2)

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**ETHNIC ORIGIN, MALLAMPATI CLASSIFICATION AND LARYNGOSCOPIC VIEW AT CS** Bell, E.<sup>1</sup>; Olufolabi, A.<sup>1</sup>; Hartle, A.<sup>2</sup> 1. *Anesthesiology, Duke University Medical Center, Durham, NC;* 2. *Consultant Anaesthetist, St Mary's Hospital, London, United Kingdom*

**Introduction:** We previously showed that at a given BMI, a Caucasian patient is twice as likely to be classified at a lower Mallampati score than an African American patient (OR 2.03). A Hispanic patient is 40% less likely to be classified at a lower Mallampati score for the same BMI (Odds ratio 0.627). We hypothesized that ethnic origin may be a factor in laryngoscopic view as well. **Methods:** Analysis of an observational database over the last two years identified 73 patients for which data on laryngoscopic view, Mallampati score and ethnic origin was available. Patients belonged to three major ethnic categories: African, Caucasian or Hispanic American. **Results:** Mallampati scores for a grade 1 laryngoscopic view were higher for African Americans compared to Caucasian Americans ( $p=0.016$ ). Mallampati scores for a grade 2 laryngoscopic view were higher for African Americans compared to Caucasian Americans ( $p=0.03$ ). Differences between Caucasian and Hispanic Americans did not reach statistical significance. **Conclusions:** Ethnic origin may be a factor predicting difficult tracheal intubation. This may have implications in the decision to provide regional anesthesia in obstetric patients.

