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**DOES PLACENTAL LOCATION AND/OR FETAL POSITION LEAD TO PROLONGED FETAL DECELERATIONS FOLLOWING LABOR ANALGESIA?** ANSA EM, EBERLE RL, DESIMONE CA, NORRIS MC, WHITE-PETTAWAY D, KOUTOULAS A, MALLOZZI A, ALBANY MEDICAL CENTER, ALBANY, NY Ansa, E.M., Eberle, R.L.; De Simone, C.A.; Norris, M.C.; White-Pettaway, D.; Koutoulas, A.; Mallozzi, A. Albany Medical Center, Albany, NY Introduction: Prolonged fetal decelerations occasionally follow the induction of epidural and intrathecal labor analgesia in 4 - 15% of cases.(1,2) Specific risk factors for prolonged decelerations have not been described, although increased uterine activity is sometimes observed.(ref: Eberle et al.) Changes in uterine activity following epidural analgesia can be regional with an increase in fundal dominance.(3) These observations raise the question: are prolonged decelerations after labor analgesia related to a combination of regional increases in uterine activity and placental location that lower uteroplacental blood flow? Alternatively, does some combination of fetal lie and placental location lower uteroplacental blood flow in the presence of increased uterine activity? Methods: After IRB approval, written consent was obtained from ASA I and 2 parturients. Placental location and fetal lie were determined from an ultrasound performed by an obstetrician. Placental positions were classified as fundal, anterior, anterior-fundal, posterior, posterior-fundal, right lateral or left lateral. Fetal lie was classified as the fetal spine being anterior, posterior, right or left. The method of labor analgesia was chosen by the patient and the anesthesia care provider. Fetal heart rate tracings were recorded from 30 minutes before to 60 minutes after analgesia was induced. Fetal heart rate tracings were interpreted by two senior obstetrical residents and confirmed by a perinatologist. All were unaware of the ultrasound data or method of analgesia. Preliminary data were analyzed using ANOVA and contingency tables. Results: 40 patients were assessed. Six prolonged decelerations were identified. There were no correlations between prolonged decelerations and placental location or fetal lie. Discussion: This is an ongoing study. IRB approval was obtained for 300 patients. 1. Eberle RL et al. *Am J Obstet Gynecol* 1998; 179:150 2. Cohen SE et al. *Anesth Analg* 1993; 77(6): 1155 3. Nielsen PE et al. *Anesth* 1996; 84(3) 540

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**UNIPOINT VS MULTIPOINT EPIDURAL CATHETERS FOR LABOUR:A META-ANALYSIS** Srebrnjak, M.<sup>2</sup> Halpern, S.<sup>1</sup> 1. Anesthesia, St. Michael's Hospital, Toronto, ON, Canada; 2. Anesthesia, Sunnybrook & Women, Toronto, ON, Canada Multiport(M) and uniport(U) epidural catheters have been used for maintenance of labor analgesia. The purpose of this meta-analysis is to determine which type of catheter results in the best analgesia with fewest complications. We conducted a computerized search from 1985/01/01 to 2001/09/30 of MEDLINE, EMBASE, and Cochrane for RCT's in English that compared M and U epidural catheters in laboring or c/s patients. We used the following text terms in the search: uniport, multiport, endhole, terminal hole catheter, single end hole and epidural catheter. Subject terms included: obstetrical anesthesia, neuraxial anesthesia and catheters. In addition, we hand searched Anesthesiol, Anesth Analg, Anaesth, BJA, CJA, I-JOA, Anesth Intens Care, and Reg Anesth for manuscripts and published abstracts. Finally, we reviewed the reference lists of all retrieved articles. We excluded RCT's that compared catheters made of different materials. We rated eligible studies for quality on a validated 5 pt scale. <3=poor quality. The search for articles, data extraction, and quality score assignment were done independently by both authors and differences resolved by reexamination of data and consensus. The primary outcome was inadequate analgesia. Secondary outcomes were unilateral block, missed segment, catheter resiting, IV catheter placement and parasthesia. We used chi square to detect heterogeneity and combined data with random effects modelling. We calculated the odds ratio(OR) and 95% confidence interval, an OR<1 favored U. The results are in the table. We found 5 trials(N=2231), 2 were of high quality. There was significant heterogeneity. The incidence of inadequate block was higher with U. There was no difference in resiting in spite of more IV placements in M. Heterogeneity was caused by differences in practice between studies. Variations in efficacy and complication rates are dependent on practice patterns and catheter design. *Reg Anesth* 1994;19:378, *Anesth Analg* 1997;84:1276, *BJA* 1997;79:279, *BJA* 1990;64:183, *Anaesth* 1989;44:587

Outcome	Uniport n/N	Multiport n/N	OR(95%)	p
Inadequate analgesia	270/1101	151/1077	1.9(1.2,3.1)	0.005*
Unilateral block	137/852	68/829	1.9(0.88,4.1)	0.1
Missed segment	52/696	24/682	2.1(0.96,4.5)	0.06
Catheter manipulation	114/242	79/245	1.8(1.2,2.7)	0.003*
Catheter replacement	67/944	44/949	1.9(0.78,4.5)	0.2
Blood in catheter	50/401	83/874	0.6(0.4,0.97)	0.04*