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HOW LOW IS LOW-RISK: WHICH PARTURIENTS MAY NOT NEED AN IV *Hess, P.E.¹ Mann, S.² Pratt, S.D.¹* 1. Anesthesiology, Beth Israel Deaconess Medical Center, Boston, MA; 2. Obstetric and Gynecology, Beth Israel Deaconess Medical Center, Boston, MA Although many parturients want the safety associated with delivery at a major medical center, some do not like the feel of modern medical care. While placement of an intravenous (IV) catheter and heplock seems innocuous, some parturients protest this as 'medicalization' of their natural process. We attempted to identify a population that may be of low-risk for requiring emergent IV access. After IRB approval, the records of 5101 consecutive parturients were examined. Information regarding the absolute requirement to receive an IV was recorded, including medical comorbidities. The type of analgesia that was received and the labor outcome were recorded. High-risk outcome was defined as cesarean delivery for nonreassuring fetal heart tracing, abruption, or assisted vaginal delivery. Chi-squared used to compare incidence, $p < 0.05$ considered significant. Women who had a legitimate reason for an IV were excluded (e.g. epidural placement, pre-eclampsia, etc.) A total of 5101 charts were reviewed, 3431 excluded. Of the remaining 1670 women, 660 delivered without analgesia (NCB), and 1010 received parenteral narcotics (PN). Of those who received PN, 691 went on to receive epidural analgesia (EA). Only 10 of the 660 women who were NCB had an emergent requirement for an IV, for an incidence of 1.5% (95%CI 0.6%-2.4%) This compared to 21 of the 319 PN (6.6% 95%CI 3.9% to 9.3%) and 81 of the 691 EA (14.9% 95%CI 12.2% to 17.6%). The incidence of being high-risk for emergent intrapartum IV access was significantly lower in the NCB than in PN or EA ($p < 0.01$) see table. Parturients who do not request analgesia are at low risk for emergent IV access and may not require a heplock. The risk increases significantly when women request parenteral narcotics, and this may be an appropriate time to place an IV.

Group	C/S NRHR	Assisted vaginal	Abrupton	Non-emergent C/S
NCB (n=660)	6	3	1	3
PN (n=391)	7	13	1	6
EA (n=691)	33	70	0	94

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DOES TYPE OF LABOR ANALGESIA ALTER THE PATTERN OF OXYTOCIN USE? *Sullivan, J.T. Scavone, B.M.; McCarthy, R.J.; Wong, C.A.* Department of Anesthesiology, Northwestern University Medical School, Chicago, IL Fetal bradycardia may occur after the initiation of neuraxial labor analgesia. It is possible that oxytocin management differs depending on the type of labor analgesia. The purpose of this prospective randomized pilot trial is to assess whether the pattern of oxytocin use before and after initiation of labor analgesia is a confounding variable when studying fetal bradycardia. After providing informed consent, 100 healthy, nulliparous patients were randomized to receive intrathecal opioid as part of a combined spinal-epidural [IT] (intrathecal fentanyl 25mcg plus epidural test dose of lidocaine 45mg with epinephrine 15mcg) or systemic opioid [SYS] (hydromorphone 1mg IV/1mg IM). All patients presented at term in spontaneous labor or with spontaneous rupture of membranes and requested labor analgesia prior to 4cm of cervical dilation. 89 patients received oxytocin to augment labor according to obstetric protocols (n=44 [IT], n=45 [SYS]). Oxytocin infusion rates were recorded for a 2-hour period (one hour prior to and one hour after labor analgesia initiation). Data were compared between groups using the Mann-Whitney U test and within groups over time using the Wilcoxon signed rank test. Oxytocin infusion rates at the beginning of the study were similar between groups. There were no significant differences ($P < 0.05$) in rate of change of oxytocin infusion either between the 2 groups during the 2-hour study period, or within each group before and after labor analgesia initiation. There was a trend toward increased oxytocin infusion rate in the first hour after analgesia in the IT group ($P = 0.08$). In this pilot study there were no differences in oxytocin infusion rates between patients receiving intrathecal [IT] opioid versus systemic [SYS] opioid analgesia, or within each group before and after analgesic intervention. However, a larger study is indicated to determine if the oxytocin infusion rates increase in the intrathecal group following analgesia.

