CONCLUSION: Rate of stillbirth among women with an induction of labor increased after implementation of policy to delay induction and persisted after exclusion of indicated deliveries. Among women with indicated deliveries, the stillbirth rate did not change after policy implementation, despite shift to later gestational age of delivery.

Demographic characteristics and obstetric outcomes of women undergoing induction of labor at term by birth year and elective or indicated JACO indication

			2005-2008 N=84,226	2011 N=20,711	p-value	Adjusted p-value*
Maternal Age: Mean (95% CI)			27.6 (27.58, 27.66)	28.1 (27.02, 28.19)	<0.001	
Maternal ethnicity: N (%)						
	White		65,061 (77.25)	15,883 (76.69)	<0.001	
	Hispanic/Latino		7,176 (8.52)	1,430 (6.90)		
	Black		3,459 (4.11)	986 (4.76)		
	Asian/Pacific Islander		5,978 (7.10)	1,634 (7.89)		
	Native American		1,553 (1.84)	380 (1.83)		
	Other/Missing		999 (1.19)	398 (1.92)		
BMI: Mean (95% CI)			32.4 (32.31, 32.40)	32.7 (32.60, 32.76)	<0.001	
Smoking: N (%)			9,860 (11.7)	2,130 (10.3)	<0.001	
JACO indicated deliveries: N (%)			49,906 (59.2)	13,882 (67.0)	<0.001	
Gestational age of delivery weeks N (%)						
	37		6,083 (7.2)	1,310 (6.3)	<0.001	
	38		13,537 (16.1)	2,489 (12.0)		
	39		24,427 (29.0)	6,540 (31.6)		
	40		24,036 (28.5)	5,805 (28.0)		
	41		14,818 (17.6)	4,259 (20.6)		
	>42		1,325 (1.6)	308 (1.5)		
Stillbirth						
	Elective Delivery					
		37-38 gestational age of delivery weeks	34 (0.50)	9 (1.13)	0.025	0.008
		>39 gestational age of delivery weeks	31 (0.11)	22 (0.36)	<0.001	<0.001
	Indicated delivery					
		37-38 gestational age of delivery weeks	28 (0.22)	15 (0.50)	0.008	0.007
		>39 gestational age of delivery weeks	30 (0.08)	6 (0.06)	0.389	0.227
Neonatal death: N (%)			203 (0.2)	57 (0.3)	0.84	0.48

*Adjusted for maternal age, maternal, BMI, smoking, and maternal ethnicity.

59 Ondansetron versus doxylamine/pyridoxine for treatment of nausea and vomiting in pregnancy: a prospective randomized double-blind trial

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OBJECTIVE: To determine whether ondansetron or the combination of doxylamine plus pyridoxine was superior for treatment of nausea and vomiting of pregnancy (NVP).

STUDY DESIGN: We performed a prospective, randomized, double blind trial of women in early pregnancy requesting treatment for NVP. Before treatment, subjects graded their nausea and emesis on two visual analog scales (VAS). Subjects were then randomized to receive either: 4mg ondansetron plus a placebo tablet or 25 mg pyridoxine plus 12.5 mg doxylamine every 8 hours for 5 days. A VAS was repeated 5-7 days after initiating the regemin to assess nausea and vomiting. Any adverse effects of the treatments were recorded. The primary outcome was reduction in nausea on the VAS by 25mm. Secondary outcomes were reduction in vomiting on the VAS and number of patients reporting sedation or constipation.

RESULTS: A total of 36 women were enrolled with 30 fully completing the study. Demographics were not significantly different between the two groups. Patients randomized to ondansetron demonstrated a greater reduction in nausea as compared to those taking pyridoxine and doxylamine ($p < .05$). Furthermore, women taking ondansetron reported less vomiting ($p = .05$). There was no significant difference between the groups with respect to sedation or constipation ($p > 0.05$).

CONCLUSION: Ondansetron was superior to the combination of pyridoxine and doxylamine for the reduction of nausea and vomiting occurring in the first trimester of pregnancy.

60 Randomized trial comparing Foley catheter to the prostaglandin E2 vaginal insert for induction of labor

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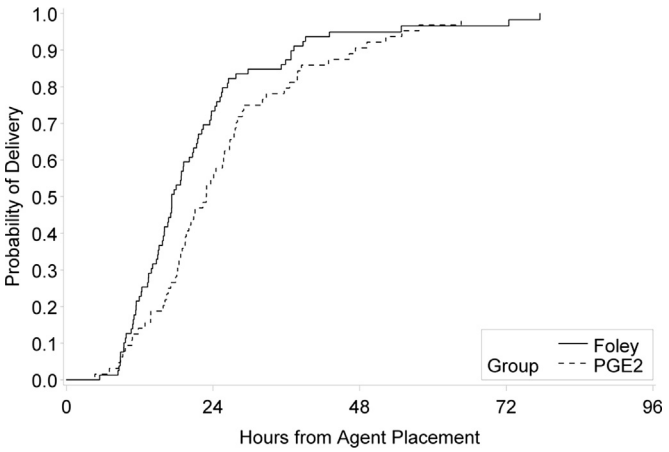
OBJECTIVE: To assess the efficacy of the Foley catheter compared to the 10 mg controlled release prostaglandin E2 vaginal insert (PGE2) for cervical ripening in term and near term women presenting for labor induction.

STUDY DESIGN: We performed a multicenter randomized controlled trial. We enrolled women at ≥36 weeks with a singleton live fetus in cephalic presentation, intact membranes, an unfavorable cervix (dilation <3 cm; if 2 cm, <80% effaced), and no contraindication to labor or either study agent. Women were randomly allocated to either a cervical Foley catheter inflated to 30 mL or PGE2 for up to 12 hours. Oxytocin was allowed only after study agent removal. The primary outcome was time from agent placement to delivery. Secondary outcomes included proportion of patients delivered by 24 hours, proportion delivered vaginally by 24 hours, time to vaginal delivery, cesarean delivery rate, indications for cesarean delivery, and maternal and neonatal complications. Analysis was by intent-to-treat.

RESULTS: We enrolled 376 patients, of whom 185 were allocated to Foley and 191 to PGE2. Time from agent placement to delivery was shorter in the Foley group (median 21.6 vs. 26.6 hours; p=0.003)—see figure. More patients in the Foley group were delivered within 24 hours (56% vs. 40%; p=0.003) and delivered vaginally within 24 hours (44% vs.30%; p=0.004). Time from agent placement to vaginal delivery was shorter in the Foley group (median 20.1 vs. 24.3 hours; p=0.005). The cesarean delivery rate did not differ between groups (30% vs. 38%; p=0.10). Additional data are shown in the table.

CONCLUSION: In term or near term women with an unfavorable cervix, starting labor inductions with a Foley catheter, compared to the prostaglandin E2 vaginal insert, results in shorter times from agent placement to delivery with no uterine tachysystole. Cesarean delivery rates and maternal and neonatal morbidity were comparable.



Cumulative incidence curve showing the time in hours on the x-axis and the proportion of women delivered on the y-axis (log-rank p=0.002).

Additional secondary outcomes

	Foley n=185	PGE2 n=191	p
Cesarean indications	-	-	0.59
Fetal heart rate tracing	41%	33%	-
Labor dystocia	54%	63%	-
Other	5%	4%	-
Clinical chorioamnionitis	6%	8%	0.38
Uterine tachysystole	0%	3%	0.06
Neonatal ICU admission	16%	18%	0.58
5 minute Apgar <7	1%	1%	>0.99

61 5-year experience with PROMP (PRactical Obstetric Multidisciplinary Training) reveals sustained and progressive improvements in obstetric outcomes at a US hospital

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OBJECTIVE: Multiple health organizations recommend simulation training to supplement traditional experiential methods. Yet, the core elements of a successful program (eg, who, content, frequency, high vs. low fidelity, and the inclusion of communication and teamwork drills) are unclear. While prior OB simulation efforts have improved provider knowledge and confidence, patient outcomes fared less well, often leading to increased C/S rates; one team reported a worse outcome after simulation training. The only OB program tested by RCT and found to improve OB outcomes is PROMPT (www.promptmaternity.org). From the UK, we Americanized PROMPT and initiated mandatory, annual training of all OB personnel with the goal of including all healthcare workers who could be involved in an OB emergency.

STUDY DESIGN: We began teaching PROMPT in August 2008. Here, we compare 2006-2012 annual rates of C/S, 5min Apgar<7, UA pH<7.00, shoulder dystocia (SD), brachial plexus injury at discharge (BPI) per SD, BPI per VagDel and perinatal hypoxic ischemic encephalopathy (HIE) per delivery using an events/trials approach to evaluate changes in annual proportions over time. Attendance of Family Medicine, Neonatology and Anesthesia is poor despite encouragement.

RESULTS: Table.

CONCLUSION: Mandatory PROMPT was associated with a significant and progressive decrease in rates of BPI/SD and BPI/VagDel while lowering the C/S rate. There was also a favorable decline in HIE. All improvements occurred despite a growing OB volume, increasing numbers of young providers, and poor participation of L&D involved but non-OB physicians. Review of individual cases suggests nonparticipants and off L&D events disproportionately contributed to the remaining poor outcomes. Combined with international results, these first US outcomes support recommendations that annual training in a 'PROMPT' like program be mandatory for all healthcare workers whose duties include L&D.

	Trainees per Year (MDs only)	Total Deliveries	C/S Rate	UA pH<7.00	HIE	SD	BPI per SD	BPI per Vag Del
2006	0	1,436	29%	8 (0.56%)	NA	NA	NA	NA
2007	0	1,541	28%	18 (1.17%)	NA	30 (1.9%)	NA	NA
2008	99 (25)	1,513	31%	1 (0.07%)	2 (0.13%)	28 (1.8%)	3 (10.7%)	0.29%
2009	54 (26)	1,587	30%	2 (0.12%)	2 (0.12%)	48 (3.0%)	5 (10.4%)	0.44%
2010	124 (28)	1,529	26%	5 (0.65%)	2 (0.13%)	37 (4.8%)	2 (5.4%)	0.18%
2011	143 (32)	1,643	23%	3 (0.18%)	1 (0.06%)	45 (2.7%)	0 (0.0%)	0.00%
2012	114 (29)	1,720	23%	10 (0.58%)	1 (0.05%)	50 (2.9%)	0 (0.0%)	0.00%

Apgar <7 at 5 min not shown.

NA, not available.