

nonmedically-indicated inductions but not for the medically-indicated inductions. Gestational age, cervical dilation, effacement and station at induction, time from admission to delivery did not significantly change after adoption of the new induction policies.

CONCLUSION: A previous study demonstrated that adoption of all recommendations in the Cesarean Prevention Consensus Guidelines decreased the overall cesarean rate at our institution. An increase in unfavorable and nonmedically-indicated inductions has been postulated as being one cause of the growing number of primary cesareans performed in the United States. However, the unintended consequence of adopting restrictive induction policies at our institution was the increase in cesarean deliveries following induction of labor. Thus, institutions should exercise caution in the implementation of strict induction policies, as their impact is still poorly understood.

765 Effect of obesity on oxytocin augmentation among women in spontaneous labor

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OBJECTIVE: Obesity is associated with an increased risk of induction, labor dystocia and cesarean delivery. Obese women have been shown to have higher rates of postterm pregnancies and a slower first stage of labor. The objective of this study was to estimate progress of labor and effects of oxytocin augmentation in obese compared with non-obese spontaneously laboring women.

STUDY DESIGN: This was a planned secondary analysis of a retrospective cohort of 6,240 women who presented in spontaneous labor at ≥ 37 weeks gestation and delivered a live born infant at a university based tertiary care center between 2004 and 2010. Women with hypertensive disorders and diabetes were excluded. The cohort was stratified by estimated gestational age in weeks at which the patient presented for delivery. Rates of successful vaginal delivery, labor augmentation, and completion of the first stage of labor were compared between obese (BMI ≥ 30) and non-obese (BMI < 30) women.

RESULTS: Obese women presenting in spontaneous labor prior to 41 weeks estimated gestational age were overall less likely to have a vaginal delivery and were more likely to have their labor augmented with oxytocin. Even in the setting of labor augmentation, obese women were less likely to complete the first stage of labor or have a vaginal delivery at all gestational ages prior to 41 weeks.

CONCLUSION: Among women who present in spontaneous labor at term, obesity is associated with lower vaginal delivery rates despite increased rates of augmentation. This effect is largely due to arrest of cervical dilation and inability to complete the first stage of labor.



	Vaginal delivery			Augmentation			Complete first stage among augmented			Vaginal delivery among augmented		
EGA (weeks)	BMI ≥ 30 (n=3098)	BMI < 30 (n=3142)	P	BMI ≥ 30 (n=3098)	BMI < 30 (n=3142)	P	BMI ≥ 30 (n=1542)	BMI < 30 (n=1344)	P	BMI ≥ 30 (n=1542)	BMI < 30 (n=1344)	P
Total	2570 (83.0)	2789 (88.8)	<0.001	1542 (49.8)	1344 (42.8)	<0.001	1292 (83.8)	1216 (90.5)	<0.001	1230 (79.8)	1158 (86.2)	<0.001
37	299 (86.4)	398 (94.3)	<0.001	168 (46.5)	169 (40.0)	0.018	148 (86.1)	164 (97.0)	0.002	146 (86.9)	162 (93.9)	0.003
38	546 (83.9)	686 (89.4)	0.002	294 (45.2)	310 (40.5)	0.075	244 (83.0)	288 (92.9)	<0.001	237 (81.3)	278 (89.7)	0.003
39	919 (84.2)	964 (88.2)	0.006	525 (48.1)	472 (43.2)	0.022	446 (85.0)	424 (89.8)	0.021	426 (81.1)	398 (84.3)	0.19
40	659 (79.8)	631 (88.0)	<0.001	449 (54.4)	324 (45.2)	<0.001	367 (81.7)	285 (88.0)	0.019	338 (75.3)	269 (83.0)	0.01
41	144 (80.0)	103 (78.0)	0.67	106 (58.9)	63 (47.7)	0.051	87 (82.1)	51 (81.0)	0.86	81 (76.4)	47 (74.6)	0.79

BMI, Body mass index (kg/m²); EGA, Estimated gestational age.

Values are n (%).

766 Risk factors associated with cesarean delivery among women undergoing an induction after 41 weeks gestation

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OBJECTIVE: Our objectives were (1) to determine the risk of cesarean delivery (CD) associated with postdates (≥ 41 weeks) induction of labor (IOL) compared to term IOL (37-40w6d) among women with an unfavorable cervix, and (2) to examine the risk factors associated with CD among women undergoing postdates IOL.

STUDY DESIGN: A planned secondary analysis of a large prospective cohort study on IOL was performed (n=854). Women with a singleton gestation, intact membranes, and an unfavorable cervix (Bishop score of ≤ 6 and dilation ≤ 2) who were undergoing a term (≥ 37 weeks) IOL for any indication were included in this analysis. Women with a prior CD were excluded. The primary outcome was CD for any indication from start of IOL to delivery. Independent risk factors for CD among those undergoing a postdates (≥ 41 weeks) IOL were determined by multivariable logistic regression.

RESULTS: The rate of CD was 46.8% among women ≥ 41 weeks (n=154), compared to 26.0% among women 37-40w6d (n=700), p<0.001. This increased risk of CD among inductions ≥ 41 weeks remained when adjusting for confounders including parity, maternal age, and BMI (aOR 2.69 [1.80-4.0]). The most common indication for CD ≥ 41 weeks was arrest of first stage of labor (45.8%), followed by fetal indications (41.7%), followed by second stage arrest (11%). Risk factors that were independently associated with CD included nulliparity, age <25, starting dilation <1 cm and Bishop score <3 (see Table). Race (p=0.4), indication for IOL (p=0.5), unscheduled IOL (p=1.0), and IOL method (p=0.9) were not associated with an increased risk of CD.

CONCLUSION: In this study, women undergoing an IOL ≥ 41 weeks with an unfavorable cervix were at a significantly increased risk of CD. Young, nulliparous women with a Bishop score <3 or dilation <1cm were at the highest risk. These findings can be used to aid in counseling women about the likelihood of CD when undergoing an IOL at ≥ 41 weeks. *Funded by a Women's Reproductive Health Research Award: K12-HD001265-15.

