

### IS-37 THE EFFECTIVITY OF BALLOON CATHETER FOR LABOUR INDUCTION IN POSTTERM PREGNANCY

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**Objective :** To determine the effectiveness of balloon catheter compared with intravaginal misoprostol in inducing labor of prolonged pregnancy.

**Design and Methods :** The study design was *historically cohort*. Data were taken from medical record of patients receiving balloon catheter and intravaginal misoprostol for inducing labor between the period of January 1998 to January 2001. Balloon catheter were inserted thoroughly the cervical canal beyond the internal os and was filled with 75 ml normal saline. Misoprostol 50 mcg was inserted intravaginally to the posterior fornix every 6 hours. As much as 110 cases meeting criteria for ballooning and 105 cases for misoprostol. Induction was successful if dilatation reached 3-4 cm or balloons were expelled. The expected outcome were the success rate of induction and the interval between insertion to active phase. Data were analysis using SPSS version 10.0. *Chi-square, t-tests, Mantel Haenszel, and logistic regression* were used as statistical analysis.

**Results :** There were 110 cases of balloons and 105 cases of misoprostol meeting study criteria. The success rate for balloon and misoprostol were 89.09% and 82.85% respectively, which is neither clinically nor statistically different ( $p=0.19$ ). Interval between insertion to active phase in the balloon and misoprostol groups were  $10.41 \pm 6.60$  hours and  $10.60 \pm 6.67$  hours respectively, which neither clinically nor statistically different ( $p=0.84$ ). In the nullipara the success rate of balloon catheter was 2.32 folds higher compared with misoprostol. Logistic regression model showed that the success rate of induction was influenced by age of mother. Interval between insertion to active phase for group of Bishop score  $\leq 4$  was  $10.90 \pm 6.75$  hours compared with  $6.28 \pm 3.03$  hours for group of Bishop score  $> 4$ , and it was highly significant ( $p=0.005$ ).

**Conclusion :** Balloon catheter was the same effective as misoprostol to induced labor in postterm pregnancy. Balloon catheter was more effective in nullipara and interval from insertion to active phase was influenced by Bishop score.

**Key words :** balloon catheter, misoprostol, induced labor, effectiveness, Bishop score

### IS-38 THE EVALUATION OF THE INFLUENCE OF DELIVERY METHODE TO THE PERINATAL MORBIDITY AND MORTALITY IN BREECH PRESENTATION WITH LOW BIRTH WEIGHT INFANTS

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**Background :** In obstetrics, breech delivery is still as an interesting matter, due to its higher rate of prenatal mortality and morbidity compared with cephalic presentation. Those conditions are caused by the high incidence of trauma and asphyxia in vaginal delivery. Tend the increased cesarean section rate in breech delivery in the aim of decreasing the perinatal problems. However, there is still many kind of management of low birth weight breech delivery, about the mode of delivery (vaginally or abdominally), and the *cut off point* of birth weight proper for vaginal delivery.

**Objective :** To evaluate effect of mode of delivery on perinatal mortality and morbidity in the low birth weight infant and to determine the *cut off point* of birth weight for vaginal delivery that giving lower risk to perinatal mortality and morbidity.

**Study design :** Retrospective cohort study.

**Material and methode :** Study population were all breech delivery during 7 years in Sardjito Hospital from 1993 to 1999. Inclusion criteria were : singleton pregnancy, a life infant when admitted to the hospital. 28 weeks or more of gestational age, and or birth weight range from 1000 to 2499 grams. Exclusion criteria were : the presence of maternal disease such as eclampsia, heart failure, placenta previa, and congenital anomalies. Dependent variables were perinatal mortality, asfiksia on 5th minute Apgar score and traumatic labor. Independent variables were mode of delivery (vaginally, abdominally). External variables were maternal age, education, body height, number of antenatal care visit, type of breech presentation, duration of membrane rupture, gestational age, and duration of labor. Hypothesis was analyzed by using logistic regression. Determination of *cut off point* was based on specificity, sensitivity, positive predictive value, negative predictive value, and ROC curve.

**Results :** Of 12.131 deliveries, there were 949 (8.0%) cases of breech delivery, and 177 of which fulfilled the inclusion criteria, thus were used in this study. Using the logistic regression, no variable influenced to the birth asphyxia significantly. Height ( $RR=6.50$  95%CI=1.029-41.072) and gestational age ( $RR=19.07$  95%CI 5.117-71.063) were variables influenced the perinatal mortality significantly. *Cut off point* of birth weight for vaginal delivery to avoid perinatal mortality was 1950 grams, sensitivity was 83.87%, specificity was 84.07%, positive predictive value was 59.09%, negative predictive value was 95.00%. Therefore, breech presentation with estimate birth weight of  $> 1950$  grams should be delivered vaginally. *Cut off point* of birth weight for vaginal delivery to avoid birth asphyxia was 2050 grams, sensitivity was 58.14% specificity was 74.19%, positive predictive value was 51.02%, negative predictive value was 79.31%. Breech presentation with estimate birth weight of  $> 2050$  grams should be delivered vaginally.

**Conclusion :** Breech presentation with estimated birth weight of 2000 grams or less will have a high risk of perinatal mortality and morbidity if delivered vaginally.

**Key words :** breech delivery, morbidity and mortality, cut of point

### IS-39 A randomized double-blind survey on the effects of pethidine on the relief of labour pains, length of labour, uterine contractions and infant's apgar score

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The aim of this study was to determine the effects of intramuscular injection of pethidine on the relief of labour pains, duration and intervals of uterine contractions, length of active phase and stage II and infant's apgar score. 88 primiparous women with the gestational ages of more than 37 weeks were studied. Based on the conditions of these women and their fetuses, all these women were candidates of vaginal delivery and their labour pains had started spontaneously. They were randomly divided into two groups: the first group received 75mg pethidine by intramuscular injection and the second group received the same volume of normal saline as placebo. Injections were done at the beginning of active phase, that is in the cervical dilatation of 5cm. Results showed that mother's sedation was significantly more in the first group ( $p<0.0001$ ). Based on visual analogue scale mother's pain after injection was less in the first group compared to the second group ( $p<0.0001$ ). Regarding the length of active phase results showed a significant decrease in the group that had received pethidine. That is in this group full cervical dilatation and the delivery of infants occurred in a shorter time than the second group ( $p<0.0001$ ). There was no significant difference between two groups in regard to the durations and intervals of uterine contractions ( $p>0.05$ ). There was also no fetal distress resulting from pethidine and even the mean of infants' apgar scores in the first minute was more in the pethidine-treated group in comparison to the placebo-treated group ( $p<0.008$ ), and there was no significant difference between two groups in regard to the mean apgar scores in the fifth minutes. Based on the results of this study pethidine in appropriate dose can be an effective drug for the relief of labour pains. It decreases the length of labour without any effect on the uterine contractions and fetus.