

Cardiotocography and perinatal outcome in women with and without meconium stained liquor.

Abstract:

BACKGROUND: There is little evidence linking meconium stained liquor to poor perinatal outcome and clear amniotic fluid is frequently considered a reassuring sign during labour. **OBJECTIVE:** To determine whether there are any differences in cardiotocography (CTG) tracings and perinatal outcomes in women with meconium stained compared with those with clear liquor in labour. **DESIGN:** A prospective cohort study. **SETTING:** The Aga Khan University Hospital, Nairobi. **SUBJECTS:** Seventy seven women presenting in labour were studied. Thirty six had meconium stained liquor and 41 had clear liquor. **MAIN OUTCOME MEASURES:** Initial and intrapartum CTG was done. Perinatal and maternal outcomes determined were birth weights, Apgar scores, admission due to foetal indications and puerperal sepsis. CTG interpretation was based on RCOG/NICE guidelines-2001. SPSS 12.0.1 was used for all analyses. **RESULTS:** Variable decelerations were the most common foetal heart rate patterns. In the initial CTG, suspicious (RR 1.033, 95% CI: 0.515 - 2.073), and pathologic (RR 1.490, 95% CI: 0.928-2.393) patterns were increased in the meconium stained group. In the intrapartum CTG, pathologic pattern was increased in women with meconium stain liquor (RR 1.096, 95% CI: 0.650-1.847). Apgar score of <7 was likely if the initial base line rate was abnormal (RR 1.357, 95% CI: 0.139 -1.009, irrespective of the state of liquor. Meconium staining of liquor was associated with Caesarean delivery (RR = 1.357, 95% CI: 1.010-1.823; P-value 0.042). There was no significant difference in the mean birth weights of the infants born to women in both groups (3359.72 grams and 3260.24 grams respectively, P = 0.282). One minute Apgar score in both groups was not significantly (RR 0.390, 95% CI:0.131-1.1611). **CONCLUSION:** The suspicious and pathologic tracings were increased in the meconium stained liquor group. There was no significant difference in the Apgar scores in both groups of women. Meconium staining of liquor was significantly associated with Caesarean delivery