Fetal Distress in Labor and Caesarian Section Rate

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Objective: To estimate the relationship between fetal distress in labor and the rate of Caesarian section.

Design: Retrospective study.

Setting: Obstetrics and Gynecology Department at Bahrain Defense Force Hospital.

Method: Emergency Caesarian sections due to fetal distress (235) performed between the 1st January 2008 to 30th June 2009 were reviewed. The major indications and the immediate causes for Caesarian section were identified. We assessed the baby outcomes by the measurement of Apgar score, neonatal intensive care admission and the need for intubation.

Result: Two hundred thirty-five emergency caesarian section were performed out of one thousand two hundred and forty five (1245) mothers were delivered by caesarian section. Total deliveries in the same period was 5945; The caesarian section rate was 21%.

The two main indications for Caesarian sections were: previous Caesarian section 337 (27%) followed by fetal distress 235 (19%), out of which 51 were performed prior to labor and 184 in labor.

Indicators of fetal distress, in labor was as follows: 22 (12%) mothers had thick meconium, non reactive CTG in 9 (5%) mothers, fetal heart deceleration in 1 (0.54%), abruptio placenta in labor in 11 (6%), and other abnormal CTG findings not classified in 141 patients (77%).

Hundred and nineteen (50.6%) were primigravida out of 235 mothers delivered by Caesarian section due to fetal distress, of which 97 mothers were in labor. Seven of 186 neonates (3.8%) had a low Apgar score (Apgar score <7 at 5 minutes). Of these 7 neonates, one required intubation and was admitted to the neonatal intensive care unit.

Conclusion: The Caesarian section rate in Bahrain Defense Force Hospital was high. The main reason for Caesarian sections was previous Caesarian section followed by fetal distress. The use of an objective assessment of fetal hypoxia would have lowered the rate of Caesarian delivery.