

THE PREDICTABILITY OF TWO CLINICAL PARAMETERS
IN ASSESSING FETAL DISTRESS:
A PRELIMINARY ANALYSIS

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This study was conducted to assess the significance of meconium and intrapartum fetal heart rate abnormalities as predictive parameters of fetal distress.

A total of 263 women in established labour were monitored by the use of an electronic system to record the fetal heart rate on a continuous basis.

The subjects were divided into two groups depending on the presence (n=86) or the absence (n=177) of meconium at the initial assessment. The sensitivity and specificity of these parameters in predicting fetal distress were assessed with regard to the Apgar score at birth as outcome.

The predictability of low Apgar in the presence of meconium alone had a sensitivity of 33.33% and specificity of 67.34% while the sensitivity and specificity of the fetal heart rate changes alone were 73.33% and 71.77% respectively.

Although the sensitivity and specificity of meconium were found to be low in predicting poor fetal outcome, when combined with the fetal heart rate changes, the sensitivity was raised to 57.14% and the specificity to 84.40%.

Therefore it is evident that the mere presence of meconium by itself is a poor predictor of fetal compromise and a more sensitive indicator in this respect will be the abnormalities in the fetal heart rate, even though its specificity remains low. Combining both parameters however, did not improve their values to significant levels in detecting a compromised fetus.