**Fetal distress in labor: fetal cardiac redistribution**

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**Objective**
To measure the ratio of the right to left cardiac output and assess risk of adverse obstetric outcome in appropriately grown singleton term pregnancies.

**Methods**
Fetal cardiac function was performed by conventional 2D and Doppler ultrasound in assessment of the systolic and diastolic function including assessment of flow velocity across the inflow and outflow tracts. The results obtained were then used to calculate the stroke volume, left, right and combined cardiac output and the ratio of the right to the left cardiac output in fetuses classified according to the indication and mode of delivery.

**Results**
The median ratio of the right to left cardiac output/ml/min/kg was 1.40 (range 0.45 to 5.49). The ratio of right to left cardiac output/ml/min/kg was statistically significant when fetuses were grouped according to the indication and mode of delivery (p=0.0019). When fetuses were grouped according to the mode of delivery, fetuses delivered by caesarean section for fetal distress had the highest difference between the right and left cardiac output/ml/min/kg (132.9ml/min/kg, p=0.03) and also the highest mean ratio (1.98; upper 95th CI=2.303; p=0.001) when compared with other modes of delivery. When fetuses were sub classified according to the centile, fetuses with highest ratio difference (>90th centile) between the right to left cardiac output were four times more likely to be delivered by caesarean section for fetal distress (Relative Risk =4.304; 95th CI: 2.482 to 7.462; p < 0.0001) when compared with fetuses with rest of the group.

**Conclusion**
Significant difference in fetal cardiac redistribution was observed in fetuses subjected to intrapartum compromise.