

## **The Offspring of Pregnancy Induced Hypertension – The Outcome**

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### **Introduction:**

Pregnancy Induced Hypertension (PIH) is a common occurrence. Maternal, foetal and neonatal mortality and morbidity often a burden.

### **Objectives:**

To assess: 1) Immediate peri(neo)natal problems and 2) Midterm outcome for the offspring of PIH.

### **Methodology:**

Retrospective data collection from maternal and neonatal files (years 2000-02) and prospective clinical evaluation of the offspring at school entry.

### **Results:**

The incidence of PIH was 3.9%; of those with PIH, 61.7% developed pre-eclampsia, none eclampsia and 4.8% HELLP Syndrome. IUGR was identified in 11.4%. Caesarean section rate was 47.9%. No maternal or foetal deaths were recorded.

Mean gestational age was 38 weeks; mean birth weight 3020g with 23.3% of SGA; correcting for Ponderal Indices (PI) only 10.2% were <10<sup>th</sup> centile. No neonatal deaths occurred and morbidities as a whole overlapped those of other babies admitted to NICU.

Of the 351 neonates, 167 (47.6%) were available for follow-up at mean age of 67 months. Somatometry revealed mean weight to be between the 75<sup>th</sup> to 90<sup>th</sup> centile whilst height nears the 75<sup>th</sup> centile and the BMI in the 85<sup>th</sup>. Mean systolic blood pressure was >50<sup>th</sup> centile whilst diastolic was ≤50<sup>th</sup> centile. Over 91.5% had a normal psychomotor development and of the remaining 8.5% showed only minor learning disabilities.

### **Discussion:**

Maternal morbidities due to PIH determined antenatal hospital admissions in a significant number of mothers and 1.1% of mother required ICU treatment either during pregnancy or after delivery.

Major neonatal morbidities were not significant, albeit 6.8% admissions to NICU. Ponderal indices at birth are better correlated to IUGR than BW/GA alone.

At follow-up many children showed to be overweight especially those with PI<10<sup>th</sup> centile at birth. Over 2/3 of the children showed raised systolic blood pressure and 13.8% were already hypertensive.

### **Conclusion:**

The offspring of PIH constitute a high risk group for the latter development of adult metabolic syndrome starting early in childhood and therefore in need of long term follow-up.