

## **OUTCOME OF INFANTS BORN TO DIABETIC MOTHER IN A TERTIARY CARE HOSPITAL**

**Deepnwita Patra<sup>1</sup>, Pradeep Kumar Jena<sup>2</sup>, Mangal Charan Murmu<sup>3</sup>, Banashree Swain<sup>4</sup> & Shreesh Bhat<sup>5</sup>**

<sup>1</sup>*Resident Physician, Department of Pediatrics, S C B Medical College, Cuttack, India*

<sup>2,3</sup>*Associate Professor, Department of Pediatric, S C B Medical College, Cuttack, India*

<sup>4</sup>*Assistant Professor, Department of Biochemistry, S C B Medical College, Cuttack, India*

<sup>5</sup>*Research Scholar, Department of Pediatric, SCB Medical College, Cuttack, India*

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### **ABSTRACT**

**Introductions:** Diabetes Mellitus (DM) complicates 35 % of all pregnancies. Type 2 DM, the most common form of DM is characterized with later onset in life, peripheral insulin resistance, relative insulin deficiency, obesity and the development of vascular, renal and neuropathic complications. More than half of the women who develop Gestational Diabetes Mellitus (GDM), which represents approximately 90 % of all cases of diabetes complicating pregnancy, will develop type 2 DM later in life.

**Aim & Objectives:** To know the complications in infants of diabetic mothers.

**Materials & Methods:** All consecutive singleton live born babies born to diabetic mothers in SCB MCH and infant of diabetic mothers who were admitted to our hospital within 24 hours of birth during the study period (October 2017 to September 2019) formed the study population. It is a hospital based Cross-sectional study.

**Results:** Hypoglycemia was the commonest complication observed in 57.4 % IDMs followed by respiratory distress, macrosomia and hypocalcemia, each constituting 37 %. Birth injury in the form of Erb's palsy was the least common complication accounting for 1.9 %. There was no statistically significant difference in the complications seen in the infants born to mothers with pre-gestational and gestational diabetes. However, there was significant relationship between some complications such as hypoglycemia and macrosomia seen in IDMs with maternal glycemic control. The incidence of respiratory complications was more in IDMs, born to mothers with suboptimal glycemic control 25 %, whereas it was 13.6 % in optimal glycemic control group. Congenital anomalies were present in 13 % of infant of diabetic mother, out of which 57.1 % had cardiac anomalies. Overall, incidence of cardiac anomalies was 7.4 %; 1 case each of PDA, ASD, VSD and MR with cleft mitral valve was observed. 1IDM with Hydroureteronephrosis, 1 IDM with cleft lip and 1 IDM with CTEV was noted in our study. In the present study, 51 (94.5 %) IDMs survived and mortality was around 5.5 %.

**Conclusions:** Neonatal complications are more common in women with suboptimal glycemic control; management goals in pregnancies complicated by Diabetes Mellitus should be able to achieve optimal glycemic control. With appropriate care and management of diabetes during pregnancy, the perinatal outcome of infants of diabetic mother can be improved.

**KEYWORDS:** Infant, Hypoglycemia, Gestational Diabetes Mellitus

