

PREVALENCE OF NEONATAL COMPLICATIONS AMONG INFANTS WITH STRUCTURAL BIRTH DEFECTS IN GALLE, SRI LANKA

De Silva, J¹, Amarasena, S², Jayaratne, K³, Perera, B¹

1-Department of Community Medicine, Faculty of Medicine, University of Ruhuna, Galle

2-Department of Paediatrics, Faculty of Medicine, University of Ruhuna, Galle

3-Family Health Bureau, Ministry of Health, Colombo

Introduction:

Birth defects in children are considered as a significant risk factor of stillbirths, perinatal deaths and neonatal, infant and childhood morbidity and mortality.

Objectives:

The objective of this study was to describe the prevalence of neonatal complications in infants with non-genetic or non-syndromic structural birth defects (SBD) in Galle, Sri Lanka.

Methods:

A hospital-based descriptive cross-sectional study was carried out by examining 315 liveborn infants with SBD aged up to six months of age. Neonatal complications were examined using the medical records of the infants. Descriptive statistics were used to present data.

Results:

The sample consisted of 179 (57%) male infants. One infant had ambiguous genitalia. Fifty-six (17%) infants were born preterm (32-36 weeks: n=40, 71%; 28-31 weeks: n=12, 22%, <27weeks: n=4, 7%). Low birth weight was observed in 102 (32.4%) infants.

Cardiovascular defects (n=398, 64%), musculoskeletal defects (n=56, 9%) and central nervous system defects (n=52, 8.4%) were the commonest SBDs.

Two hundred and thirteen (68%) infants were found to have one or more complications during neonatal period. Difficulty in breathing (n=78, 24.8%), poor sucking (n=77, 24.4%), neonatal sepsis and infections (n=69, 22%) were the common complications observed. Reduced saturation (n=38,12%), cyanosis (n=31, 10%) and neonatal jaundice (n=36, 11%) were also seen. Sixteen neonatal deaths (5%) were reported and eight (50%) of them were early neonatal deaths. For 111 (32.5%) infants of the sample, care was provided by the Special Care Baby Unit while Neonatal Intensive Care was provided for 52 (16.5%) of the infants.

Conclusion:

Structural birth defects seems to have a significant impact on morbidity and mortality in neonates and the affected neonates are supposed to depend on special care services. Sri Lanka should strengthen the birth defects prevention programmes in order to reduce the associated childhood morbidities and mortalities and the impact on health care delivery systems.