THE PROFILE OF INFANTS WITH STRUCTURAL BIRTH DEFECTS IN GALLE, SRI LANKA

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Introduction:

Birth defects among children has become a significant public health problem and epidemiological profile of such cases is imperative to make health interventions.

Objective:

The aim was to find out the epidemiological profile of infants with non-genetic, structural birth defects (SBD) in Galle, Sri Lanka.

Methods:

A hospital-based, descriptive cross-sectional study was carried out. Infants with SBD which were not found to have a genetic basis, aged up to six months residing in Galle were studied. Data on SBD, confirmed by a paediatrician were gathered from the available medical records. Results:

Three-hundred and fifteen (315) infants with SBD were studied. One hundred and seventynine (57%) were male infants. Fifty-six (18%) were born preterm. Eighty-one (26%) infants had SBD found in multiple systems. A total of 620 SBD was reported. The majority were cardiovascular (CVS) defects (n=398, 64%) followed by the musculoskeletal defects (n=56, 9%, skeletal 41, muscular 15) and central nervous system (CNS) defects (n=52, 8.4%). Thirtysix (6%) oral-facial clefts, 30 (5%) gastrointestinal defects and 22 (3.5%) urinary tract defects were reported.

The most common SBD of the CVS was ostium secondum atrial septal defect (OS II ASD) (n=219, 55%). Isolated ASDs were found among 84 infants while the rest were presented with other CVS defects or extra cardiac defects. The second and third commonest CVS defects were patent ductus arteriosus (PDA) (n=79, 19.8%) and ventricular septal defect (VSD) (n=48, 12.1%) respectively.. The commonest CNS defect was congenital hydrocephalus (n=18, 34.6%) followed by spina bifida (n=11, 22.7%). There were three (n=3, 6%) encephaloceles and one anencephaly (2%). Congenital talipes (n=23, 56%) was the commonest skeletal defect reported while congenital defects of the diaphragm (n=11, 73%) were the commonest muscular defects. Cleft hard and soft palate (n=13, 36%) with unilateral cleft-lip was the commonest oral-facial cleft. Imperforate anus (n=11, 37%) and intestinal stenosis (n=10, 33%) were the commonest gastrointestinal defects.

Conclusion:

Cardiovascular, musculoskeletal and central nervous system defects were the prevalent SBD found in this sample. Health care delivery systems of Sri Lanka should prioritize and target these conditions in prevention and management of birth defects.