

### **Mortality of congenital heart diseases in a neonatal intensive care unit**

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**Objectives:** To determine the mortality of congenital heart disease (CHD) in a neonatal unit of a tertiary care hospital.

**METHODS:** The prospective study was carried out in a neonatal unit from april 2015 to march 2017. All confirmed CHD admitted with gestational age of > 28 weeks irrespective of birthweight were included in the study. Atrial defects and patent ductus arteriosus were excluded from the study. Data was collected on a predesigned proforma containing information regarding consanguinity, gender, gestational age, and weight at birth, family history, and associated malformations.

**RESULTS:** Fifty five newborns were included in the study. Sex ratio was 1.03. Antenatal diagnosis was noted in 11% of cases. Parental consanguinity was present in 22% of cases. 38% of cases were syndromic especially trisomy 21. Mean age at echocardiographic diagnosis was 2 days and the most frequent indications for this exam were the presence of a murmur followed by respiratory distress and cyanosis. Most frequent anomalies were ventricular septal defect 29 (52.7%), followed by tetralogy of fallot 4 (7.2%), transposition of great arteries 04 (7.2%), troncus arteriosus 4 (7.2%), interruption of arch artery 4 (7.2%) and atrioventricular canal defects 3(5.5%). Mechanical ventilation and prostaglandines infusion were respectively indicated in 45% and 30% of cases. 18% of babies were operated. Mortality rate was 40% and the letality by CHD was 68%.

**Conclusion:**

Despite advances in neonatal diagnosis and resuscitation of CHD, their management is limited in Tunisia because of an insufficient technical platform and human resources especially in cardiovascular surgery departments. Furthermore, the lack of insurance coverage for all types of severe CHD fails to provide surgery in developed countries for all patients.