

Incidence of congenital heart disease in a neonatal unit of a tertiary care hospital in Tunisia

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OBJECTIVES: To determine the incidence and pattern of various congenital heart diseases (CHD) in a neonatal unit of a tertiary care hospital.

METHODS: The prospective study was carried out in a neonatal unit of a tertiary care hospital from 2015 to 2016. All neonates admitted with gestational age of > 28 weeks irrespective of birth weight were included in the study. Neonatologist carried out the neonatal examination during the first 12 hours of life. Neonates suspected of having congenital heart disease were further evaluated by pulse oxymetry, X-ray chest and neonatologist performed echocardiography. The findings of echocardiography were confirmed by pediatric cardiologist in case of structural and/or functional cardiac abnormalities.

RESULTS: Of the 13406 neonates born during the period of the study, 123 were found to have congenital heart disease with an incidence of 9.2/1000. 91% of newborns were inborn. Prenatal screening was done in 11% of cases. Median gestational age at diagnosis was 36 weeks. Most common lesion was atrial septal defect 35 (28.5%), followed by ventricular septal defect 29 (23.6%) and patent ductus arteriosus 25 (20.3%). The other CHD were essentially tetralogy of fallot 04 (3.2%), transposition of great arteries 04 (3.2%), truncus arteriosus 04 (3.2%) and interruption of arch artery 04 (3.2%), double- outlet right ventricle 03(2.4%) and atrioventricular canal defects 03(2.4%).

CONCLUSION: Congenital heart diseases are a common congenital anomaly which must be diagnosed as earlier as possible. Its incidence varies from centre to centre due essentially to method of detection and early examination by a neonatologist. Promote early diagnosis is important to consider in order to improve management of CHD in our country.