



PD016

Paediatric Cardiology & Congenital Heart Disease • Poster Presentation

PATTERN OF CONGENITAL HEART DISEASE IN NEONATES AT THE UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL, RIVERS STATE, NIGERIA

1) Alerechi-Ogbugo, D. J. 2) Ewuzie, A. A. 3) Chukwu, C. J. 4) Tabansi, P. N. 5) Otaigbe, B. E.

Stand: POSTER #PD016 | **Venue:** Poster Exhibition Hall & Gallery - Eko Convention Centre | **Online Ref:** <https://nigeriancardiacsociety.com/abstracts/PD016>

Background: Structural cardiac anomalies present at birth constitute the most prevalent congenital malformation globally, contributing significantly to annual infant death. Paediatric cardiac surgical capacity in Nigeria has since expanded, with a growing number of centres now offering these services locally; however, cost remains prohibitive for the predominantly indigent population who need them most. The range and distribution of specific CHD lesions among neonates at the University of Port Harcourt Teaching Hospital have not been comprehensively characterised in recent years, creating a gap in the evidence base needed to guide screening and service planning.

Methodology: Medical records of neonates aged 0–28 days who underwent echocardiographic evaluation at UPTH from January 2021 to December 2025 were reviewed in a prospective cross-sectional study. Cardiac lesions were categorised as acyanotic or cyanotic. Inferential statistical significance was set at $p < 0.05$

Results: Of 133 neonates evaluated, acyanotic lesions predominated in 118 cases (88.7%). Atrial septal defect (ASD) was the most frequently diagnosed single lesion (36%), followed by combined ASD and Patent Ductus Arteriosus (23.3%). Fast breathing (44.3%) and incidental cardiac murmur (41.3%) were the most common indications for referral. Cyanotic CHD was associated with female sex and syndromic features.

Conclusion: Acyanotic CHD, particularly ASD, predominates, with cyanotic CHD significantly associated with female sex and syndromic features—findings with screening implications. A low threshold for echocardiographic referral, and investment in affordable, sustainable paediatric cardiac surgical services in the Niger Delta are recommended.

Keywords: Congenital heart disease, neonates, echocardiography, acyanotic, cyanotic, atrial septal defect, Niger Delta, Nigeria, pattern, persistent pulmonary hypertension of the newborn