OMICS Group Conferences
Accelerating Scientific Discovery

International Conference on
Pediatrics & Gynecology

Characteristics and long-term outcome of non-immune isolated atrioventricular block diagnosed *In Utero* or early childhood – A multicenter study

Alban-Elouen Baruteau[1,2,3,4,5]

[1]CHU Rennes, France
[2]Université de Rennes 1, France
[3]INSERM, France
[4]INSERM, U642, France
[5]Institut du Thorax, France

Introduction: The natural history of congenital or childhood non-immune, isolated atrioventricular (AV) block is poorly defined.

Methods: We retrospectively studied 141 children with isolated, non-immune AV block diagnosed *in utero*, or up to 15 years of age, at 13 French medical centers, between 1980 and 2009. Patients with structural heart disease or maternal antibodies were excluded.

Results: AV block was asymptomatic in 119 (84.4%) and complete in 100 (70.9%) patients. There was progression to complete AV block in 29/41 (70.7%) patients with incomplete AV block over 2.8 ± 3.4 years (1-155 months) but all patients with incomplete AV block may not have been included in the study. Narrow QRS complex was present in 18 of 26 patients (69.2%) with congenital, and 106 of 115 (92.2%) with childhood AV block. Pacemakers were implanted in 112 children (79.4%), during the first year of life in 18 (16.1%) and before 10 years of age in 90 (80.4%). The mean interval between diagnosis of AV block and pacemaker implants was 2.6 ± 3.9 years (0-300 months). The pacing indication was prophylactic in 70 children (62.5%). During a median follow-up of 11.6 ± 6.7 years (1-32 years), no patient died or developed dilated cardiomyopathy. The long-term follow-up was uncomplicated in 127 children (90.1%).

Conclusion: In this large multicenter study, the long-term outcome of congenital or childhood non-immune, isolated AV block was favorable, regardless of the patient's age at the time of diagnosis. No patient died or developed dilated cardiomyopathy, and pacemaker-related complications were few.