

# 4<sup>th</sup> International Conference on **Clinical & Experimental Cardiology**

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## **Cochlear implantation and cardiac associations**

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Cochlear implantation is a standard surgery for restoration of hearing in profoundly deaf candidates. Profound deafness may at times, manifest as a part of a syndrome associated with cardiac anomalies. Cardiac co-morbidities may influence cochlear implantation in a spectrum of ways from minor intra operative issues to major life threatening complications. Issues related to pre-operative, intra operative and post-operative care needs to be addressed by an efficient in house cardiologist.

Our retrospective study was aimed at analyzing the various cardiac co-morbidities encountered in 500 cochlear implants over the past decade. This study was focused on developing a profile of cardiac complications influencing cochlear implantation and suggests a protocol for management of various cardiac issues related to cochlear implantation. My presentation will reflect the surgeon's perspective of standard pre-operative work up and peri-operative and post-operative care to be given during cochlear implantation. Relevant literature has been reviewed. Case series of 30 profoundly deaf children (below 12 years) who had associated cardiac problems and underwent cochlear implantation in our institution were included in our study. Over all cardiac disease were identified in 30 out of 500 implantees (16.6%) in our experience.

The cardiac disease can be categorized into 3 groups: candidates with isolated Patent Ductus Arteriosus (PDA) as Group A (8/30), Syndromic and non Syndromic candidates with PDA and other associated anomalies as Group B (18/30), and candidates with syndromes without PDA association as Group C (4/30).

The overall incidence of cardiac problems in profoundly deaf candidates is identified. Descriptive profile of the same has been created and appropriate management for the same discussed.

A protocol for management of cardiac co-morbidities influencing cochlear implantation has been designed and detailed insight for the optimal management of these issues has been discussed with surgeon's perspective.

## **Biography**

Senthil Vadivu Arumugam has completed her DNB at the age of 30 years. She is the coordinator of Cochlear Implant program at Madras ENT Research Foundation. She has published 5 papers in reputed International Journals. She has attended various National and International Conferences and presented papers in scientific sessions and won awards for few. She worked as a Joint secretary for 1st National Conference on snoring and Sleep Apnoea, Chennai, February 2013.

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