



TRANSCATHETER CLOSURE OF GERBODE DEFECT: EXPERIENCE FROM A TERTIARY CARE CARDIAC CENTRE IN EASTERN INDIA

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Background:

Gerbode type of ventricular septal defect (VSD) is rare anomaly where there is communication between left ventricle (LV) and right atrium (RA). This anomaly accounts for 0.08% of intracardiac shunts and <1% of all cardiac defects. This defect can be congenital or acquired. They are traditionally closed by surgery although few small case series and reports are available regarding percutaneous closure of such defects. This study aims at retrospective analysis of the feasibility and short term follow up of transcatheter closure of Gerbode type of VSDs in children from our institution.

Objectives:

We aim to evaluate our experience of transcatheter closure of Congenital Gerbode type of VSD.

Methods:

We performed retrospective data review of patients with congenital Gerbode type VSDs treated by transcatheter method from April 2016 to December 2021 in our tertiary care cardiac centre in Eastern India.

Results:

In our retrospective study we identified twenty five children with the above mentioned defects with age ranging from 7 months to 15.5 years (mean 72.67 months) and weight from 3.8 Kg to 43.6 Kg (mean 15.91). Four Lifetech Konar-Multifunctional Occluders, three Amplatzer duct Occluder I, one Lifetech muscular device and seventeen Amplatzer duct Occluder II were implanted successfully. Procedure was abandoned in two cases due to significant aortic regurgitation and embolization to RV respectively. Transient AV block was present in two cases which required steroid post procedure and discharged in sinus rhythm. Complete AV block was not reported in any cases. Immediate follow up showed mild intradevice shunt in two patients along with moderate tricuspid regurgitation. However, in six months follow up the shunt was



noted to be trivial with mild TR. Moderate pulmonary arterial hypertension (PAH) was present in five cases whereas severe PAH was there in three cases.

Conclusions:

Transcatheter closure of Gerbode type VSD appears to be safe and feasible option using different available devices as a promising alternative to surgical closures. Although there are no tailormade devices for Gerbode defects; however, the available devices provide substantial safety in closing such defects successfully.

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