

### Stenting of the right ventricular outflow tract: single center experience

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#### Background

Neonates and infants with decreased pulmonary blood flow due right ventricular outflow tract (RVOT) obstruction may need shunt to treat hypoxemia. We report our experience about stenting RVOT as an alternative procedure to temporarily improve pulmonary blood flow.

#### Methods

Retrospective procedural chart review of patients undergoing stenting of the RVOT between July 2014 and July 2015 was performed.

#### Results

Nine patients underwent 11 RVOT stenting procedure. One patient had an RVOT stent when he was 3 days old and stent was dilated with another stent (stent-in-stent) 3 months later. The other patient who required second procedure needed ECMO because of cardiac arrest during the first procedure and 2 days later RVOT stenting could be performed under ECMO.

In 2 patients transient complete AV block occurred and one returned to sinus rhythm during the procedure. Although second patient's AV block continued for 2 days did not needed pacemaker (this patient was under ECMO). In one patient (5-year-old), who is also under ECMO, both RVOT stenting, left pulmonary artery stenting and recanalization of central shunt procedures were performed. None of the patients died after successful intervention.

In one patient procedure was canceled (long sheath could not be advanced to the RVOT) and in one patient stent embolized in to the ventricle and patient underwent surgical extraction of the stent and BT shunt.

#### Conclusion

- Stenting of the RVOT can be a treatment option for selected patients with very reduced pulmonary blood flow.
- Interventionist should be aware of the complications.