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**Stenting of the Right Ventricular Outflow Tract in Patients with Tetralogy of Fallot**

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**Introduction:** In a few patients with Tetralogy of Fallot (TOF) a palliative treatment has to be considered prior to corrective surgery, because of severe hypoxia. Beside surgical implantation of an aortopulmonary shunt and stenting of the ductus arteriosus, stent implantation into the right ventricular outflow tract (RVOT) is a third option, especially in patients with a small RVOT and a duct already closed.

**Methods:** We investigated safety and efficacy of RVOT stenting in patients with TOF retrospectively. For this we analyzed the intervention, as well as pre- and postinterventional data of n=7 patients with TOF, in whom we intended to place a stent into the RVOT.

**Results:** The median age was 20 (1-167) days. The procedure was effective in 6/7 patients. In three of them we implanted one stent and in the other three we needed two stents to cover the whole obstructed segment. The diameter of the stents was 5mm in four, and 6mm in the other two patients. The median hospital stay after the intervention was 5 (1-8) days. The patient in whom we couldn't implant the stent had an atrio-ventricular-septal defect with TOF and an azygos continuation. This child got an aorto-pulmonary shunt, but died later on in multi-organ failure.

Currently n=4 got surgical correction 44, 55, 86, and 144 days after RVOT stenting. The stents could be explanted easily despite adhesions, except one patient, in whom a larger incision of the right ventricle was needed to remove the two stents 55 days after implantation. One patient is waiting for surgical correction. One patient is lost follow-up,

**Conclusions:** RVOT stenting is an effective procedure to stabilise pulmonary perfusion and to postpone surgical correction in cyanotic patients with TOF. Corrective surgery is feasible as usual also after RVOT stenting.