

PW4-2

Weaning from ventricular assist device in non – myocarditis pediatric heart failure patients.

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Retrospective analysis of a single-center experience with successful weaning procedures in children supported by the BerlinHeart - Excor paracorporeal ventricular assist device. Weaning was completed in 5 of 19 VAD applications. Patients: age: 3 months- 15 yrs. (median 8 months); indication: DCMP (3), ischemic heart failure (1), DCMP and congenital Heart defect (1); myocarditis ruled out by biopsy in 5/5; all pts. had been listed for urgent Heart Tx at time of VAD implantation. VAD mode: 3 LVAD, 2 BIVAD, LV-apex cannula in 5/5. Duration of MCS until weaning: 12 – 42 days (median 25 days). Preconditioning instruments (ie. intracoronary stem cell infusion, pulmonary artery banding), evaluation of possible myocardial recovery and the weaning procedure itself are described in detail. In 2/5 forced weaning was mandatory due to VAD related infection and risk of thromboembolic events. Results: weaning was completed in 5/5 patients: 2/ 5 need a 2nd VAD 15 days/6 months resp. before transplantation; in 3/5 myocardial recovery sustained. Conclusions: Weaning is always an option even for non – myocarditis pediatric patients; Weaning is possible after a short time unloading on VAD. Temporary weaning off MCS is reasonable to avoid VAD related complications.