(extracorporeal membrane oxygenation) support at a tertiary care Hospital in Mexico.

METHODS: DESIGN: A retrospective and descriptive study was designed, from January 2012 to January 2020. CONTEXT AND PARTICIPANTS: We reviewed all children with congenital or acquired heart disease admitted to the Cardiovascular Intensive Care Unit underwent extracorporeal membrane oxygenation support at a tertiary care Hospital.

RESULTS: A total of 27 patients met the inclusion criteria. Age range was 7-17 years (median 12 years). There was a female predominance (n=15, 56 %). Overall 22 patients (81 %) received VA ECMO of which 13 (59 %) had central ECMO and 9 (41 %) had peripheral ECMO. Median ECMO duration was 218 hours. In 15 patients, ECMO was introduced after operation for congenital heart disease. The most common procedure-related complication was major haemorrhage (n=11) and renal failure requiring renal replacement therapy (n=9). Overall survival to hospital discharge was 63 %. all survivors were discharged with favourable neurological outcome.

CONCLUSIONS: In this retrospective study of pediatric patients with heart disease supported on ECMO, survival to hospital discharge was 63%, similar to that collected by Extracorporeal Life Support Organization in 2019. Finally, ECMO for heart and respiratory failure in infants and children is effective, and allows time for recovery of cardiac dysfunction and acute hypoxic insult.

P0239 / #1206

NEONATAL MYOCARDITIS AND ECMO SUPPORT. CASE REPORT.

G. Foronda[1,2], R. Forgarolli[2], S. Barbar[2], C. Campos[1], V. Melo[3], G. França[1], C. Tossuniam[4]

[1]Hospital Israelita Albert Einstein, Pediatric Cardiology, SÃO PAULO, Brazil, [2]Clinica Foronda, Pediatric Cardiology, SÃO PAULO, Brazil, [3]Clinica Foronda, Quality Department, SÃO PAULO, Brazil, [4]Hospital Israelita Albert Eintein, Pediatric Cardiolovascular Surgery, SÃO PAULO, Brazil

AIMS & OBJECTIVES: Extracorporeal membrane oxygenation support (ECMO) has been increasingly used in neonates as a bridge to recover ventricular function[1]. However, this role is still not well established, due to the lack of studies in the pediatric population[2]. Therefore, the objective of this study is to report a case of a neonate diagnosed with myocarditis due to viral infection by enterovirus, which rapidly progressed to a cardiovascular collapse, requiring ECMO support for recovery of ventricular function.

METHODS: Case report: Infant, 6 days old, was admitted to the emergency department with fever and irritability, being diagnosed with viral meningitis, with the presence of isolated enterovirus in the CSF. It evolved with a progressive worsening, signs of low cardiac output, laboratory changes (lactate and troponin) and electrocardiographic changes (repolarization changes), in addition to arrhythmia (ventricular tachycardia). After 7 days, already on mechanical pulmonary ventilation, and on vasoactive drugs, the pacient showed signes of important and progressive left ventricular dysfunction. Circulatory support was indicated and ECMO initiated.

RESULTS: He remained on therapy for 8 days, associated with renal replacement therapy, only being discharged after 50 days, with fully preserved neurological function and ventricular function of 58% (Simpson).

CONCLUSIONS: Discussion: Neonates with viral myocarditis have a high mortality rate due to multiple organ dysfunction, with failure of conventional therapies. ECMO being a bridge for the recovery of cardiac function should be considered [3,4], reaching a rate of 62.9% survival, according to a recent meta-analysis[5].

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ECMO THERAPY IN SEPTIC AND CARDIOGENIC SHOCK FROM BACTERIAL ENDOCARDITIS DUE TO S. GORDONII, IN INCOMPLETE SHONE SYNDROME.

I. García Ramos[1], L.E. Medina Concebida[1], J. Hernández Tiscareño[1], L. Arce[1], C. Riera[2], E. Hernandez[3]

[1]UMAE. Hospital de Cardiología "Luis Méndez" CMN Siglo XXI. IMSS, Pediatric Intensive Care Unit, Ciudad de México, Mexico, [2]UMAE. Hospital de Cardiología "Luis Méndez" CMN Siglo XXI. IMSS, Surgery Deparment, Ciudad de México, Mexico, [3]Instituto Mexicano del Seguro Social, Surgery Department, CUAUHTEMOC, Mexico

AIMS & OBJECTIVES: The association of complex congenital malformations such as Shone syndrome and bacterial endocarditis, in native aortic and mitral valves, has a low incidence, 0.05-0.12 cases per 1000 pediatric admissions, while the tranesophageal echocardiogram remains the study of choice for the diagnosis, few cases of VA ECMO have been reported in pediatric patients with these pathologies, such as the one reported by Van Sint Jan et al, which is very important.

METHODS: Case report and literature review.

RESULTS: A male child, 10-years old, he was born in México City. At birth, heart murmur is detected, without follow-up. It begins 3 months prior to admission with a common cold condition, evolving 3 days prior to admission with shock data and hours after cardiorespiratory arrest. A physical examination with rhythmic heart sounds, systodiastolic murmur in aortic focus grade II / IV and systolic murmur grade II / IV in irradiated bar mesocardium, diminished peripheral and central pulses and delayed capillary filling. Cardiovascular support with levosimendan, adrenaline and norepinephrine. Transesophageal echocardiogram is performed with the presence of aortic and mitral valve vegetations and biventricular systodiastolic dysfunction. Aortic, mitral valve replacement and ECMO V-A placement by refractory cardiogenic shock is performed for 14 days, with blood culture isolation of S. gordonni, progressing to multi-organ failure and death.

CONCLUSIONS: This is one of the few cases reported with infectious endocarditis that required extracorporeal life