Pediatric Heart Trasplantation in Spain.

Data From the National Registry



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Background

Spanish National Heart Transplantation Registry has gathered on a mandatory basis data from all patients trasplanted in the country since 1984. There are currently 6 centers performing trasplants for children and 16 centers for adults where some pediatric trasplants were performed in the past. Data is updated yearly. independent pediatric report was established in 2014.

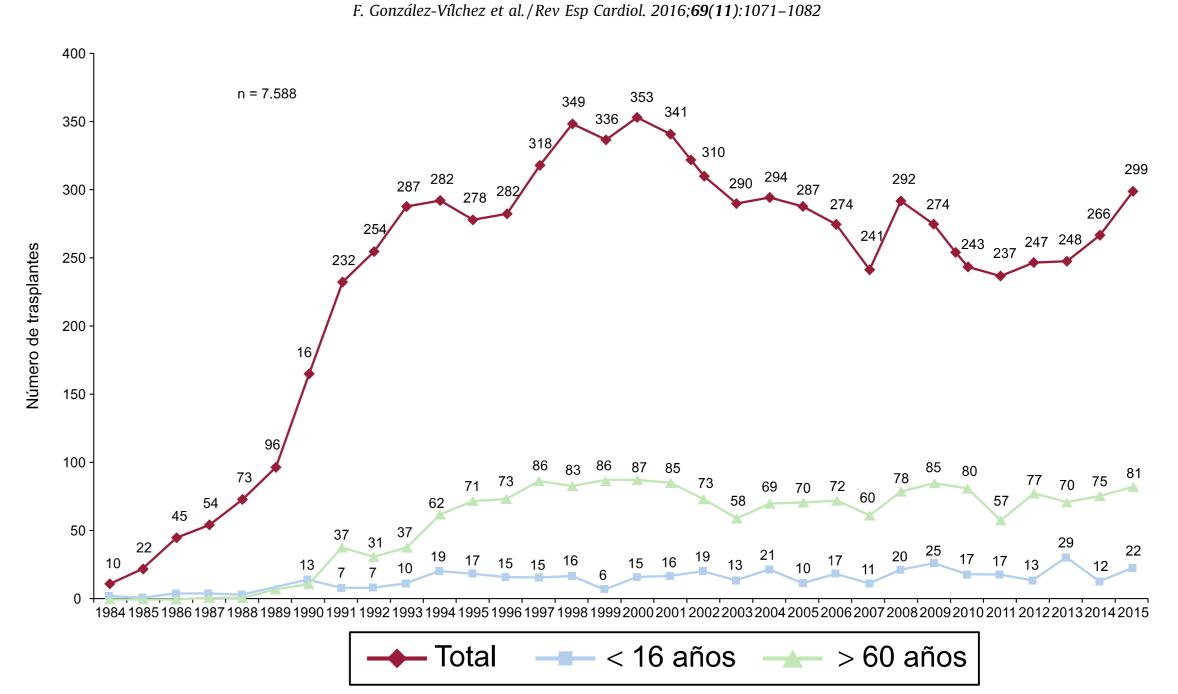
Method

Retrospective analysis of the Spanish National Heart Transplantation Registry. The registry includes 175 clinical data including pretrasplant data, surgical, follow-up and status.

Purpose

The purpose of this report is to describe the clinical characteristics and prognosis pediatric of heart transplantation in our country.

Patients transplanted per year in Spain according to age groups



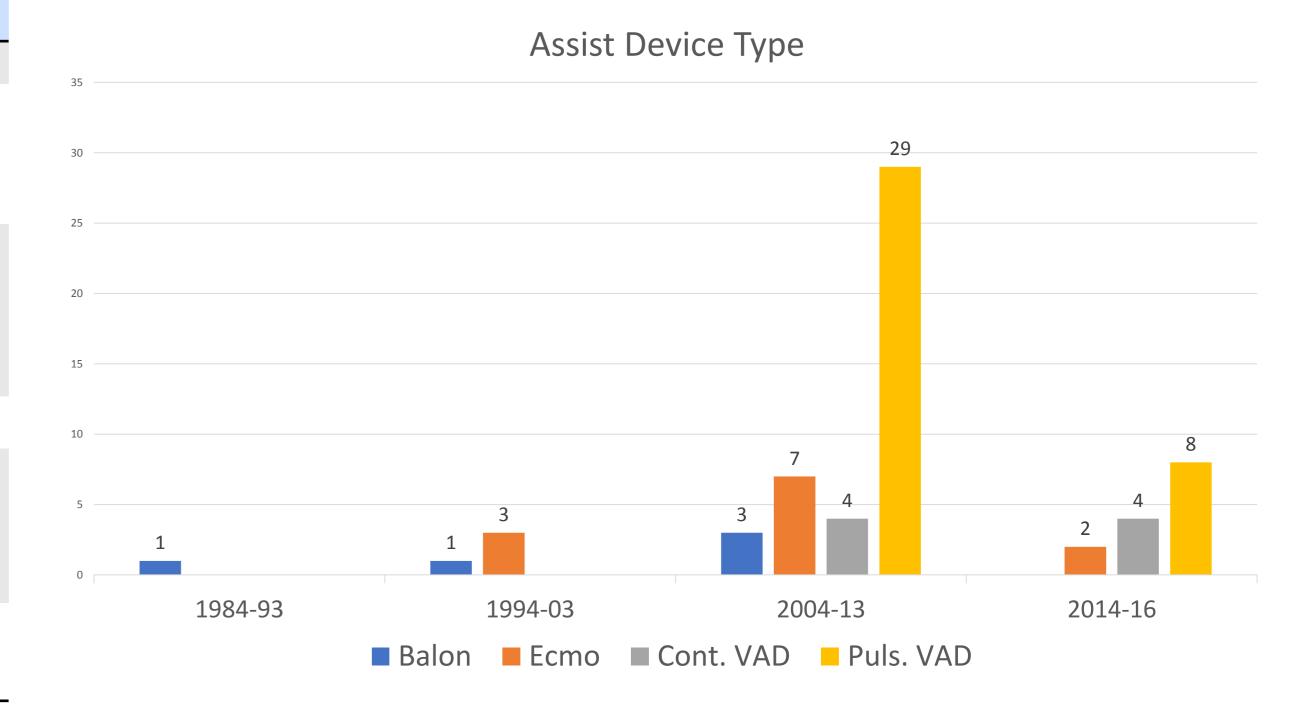
Results

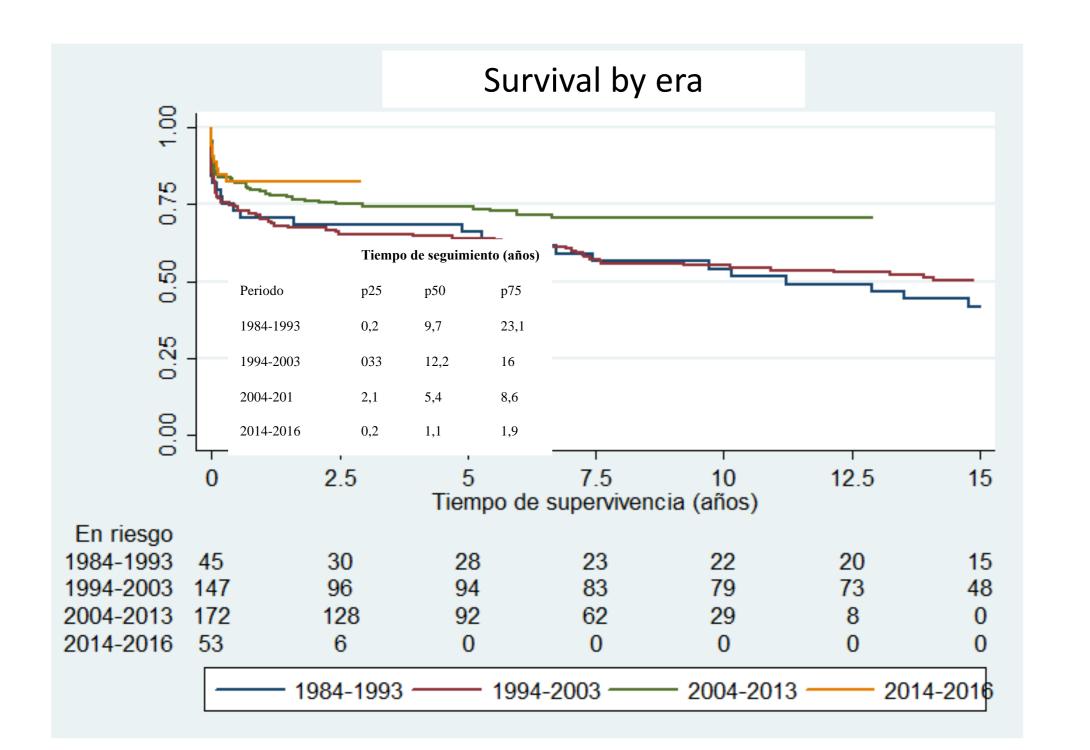
- 7869 patients were included from 1984-2016, 417 < 16 y. 27% < 1y, 38% 1-10 y and 34% >10y.
- Nowadays 63% are urgently listed and half of them require ECMO or VAD.
- Indication was congenital heart disease (CHD) in 162 and cardiomyopathy in 239.
- Immunosuppression included induction with basiliximab and tacrolimus, MMF and steroids in over 80% of cases.
- 30% of the donors were adults;
- Weight of the donor doubled the recipient s in over 30%;

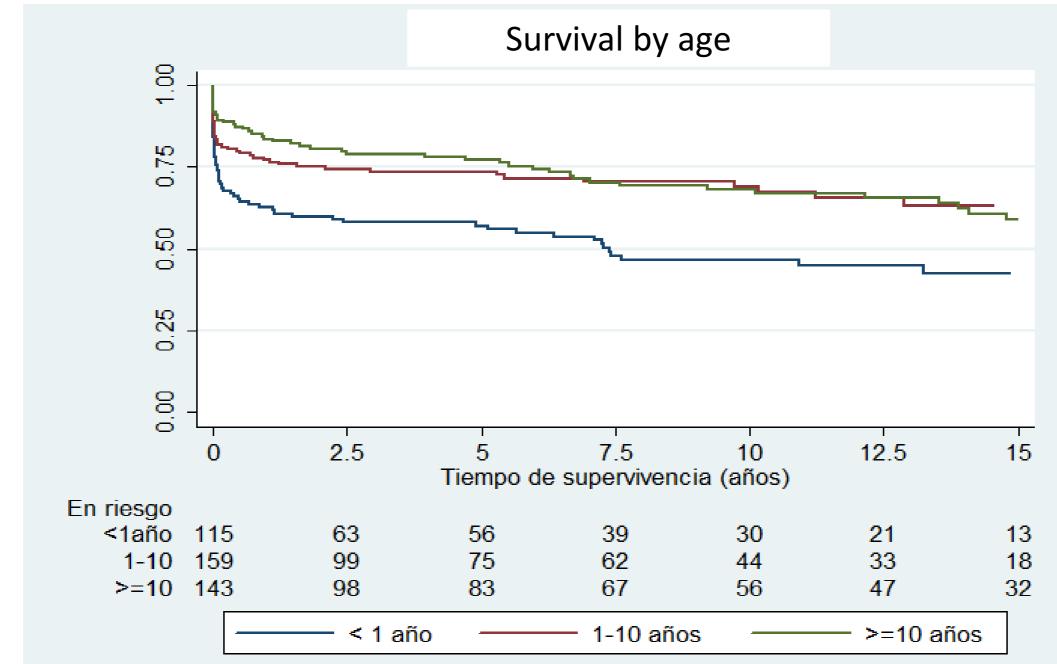
- 35% had ischemic time over 240 min
- Overall survival was 83%, 75%, 70%, 62% and 55% at 1 m, 1y, 5y, 10y and 15y.
- Patients < 1 year of age, with CHD and those urgently listed without a VAD had worse survival.
- Patients with a VAD had similar outcome as those electively transplanted.
- Most common causes of death have been primary graft failure (13/74 deaths) and rejection (10/74).
- 24/417 5,5% of patients had a tumor during follow-up lymphoma being the most common (20/24).

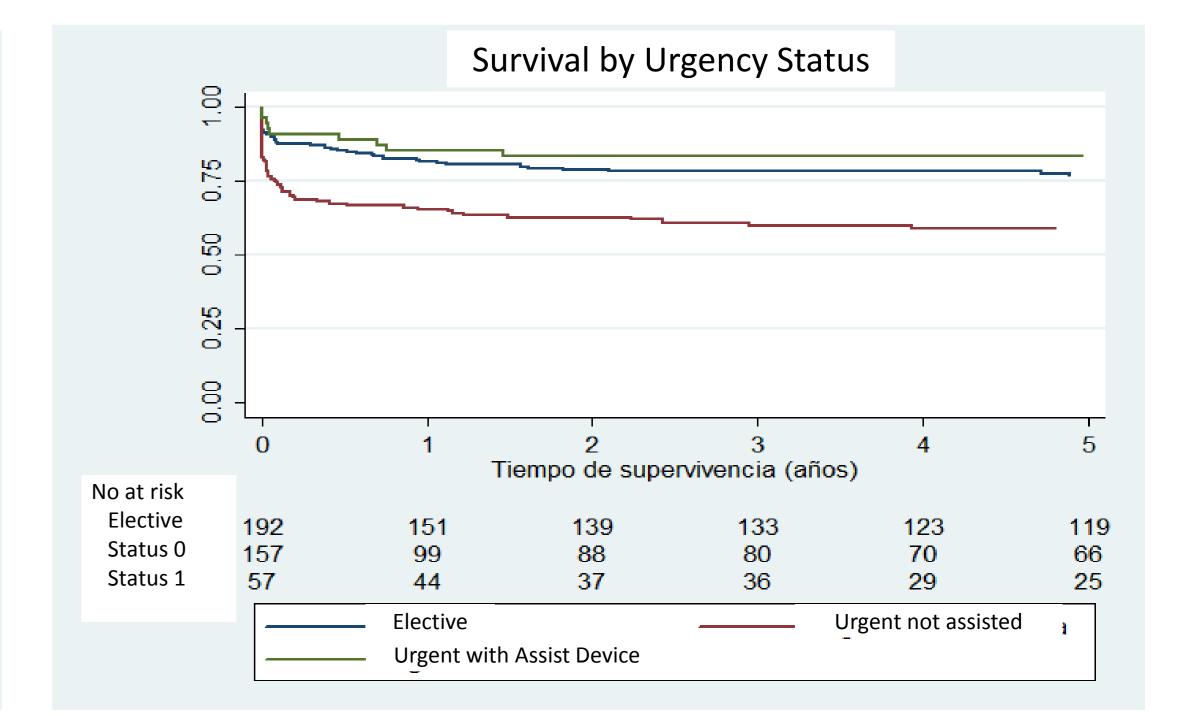
	Global		2016	
	n	%	n	%
Patients (n)	417		19	
Male	265/417	63	11/19	57,9
Age (years) •<1 yr •1-10 yrs •≥10 yrs	115 159 143	27,6 38,1 34,3	5 8 6	26,32 42,11 31,58
IMC (kg/m2)	390	15,3±3,6	19	16,3±4,3
Urgency Status •Elective •Urgency St 1 •Urgency St 0	192 157 57	47,3 38,7 14	19 7 6 6	36,84 31,58 31,58
Previous Surgery	143/395	36,2	9/15	60

	Global		2016	
	n	%	n	%
Etiology •CHD •MC •Misc	417 162 239 16	38,9 57,3 3,8	19 9 8 2	47,4 42,1 10,5
NYHA Status I II II II II IV	391 3 11 120 257	0,8 2,8 30,7 65,7	2 0 8 6	12,5 0 50 37,5
Weight D/R >2	114/387	29,5	7/19	36,8
Cause of death CVA Trauma Misc.	398 91 170 137	22,9 42,7 34,4	3 8 8	15,8 42,1 42,1
Ischemic time (min) >240	402 147	221,7±63.3 36,6%	19 7	241,5±46,1 36,8 %









Conclusions

- Heart transplantation in the country offers good short and medium term survival.
- Patients under one year of age and patients with CHD are challenging.
- Ventricular assist devices have improved survival for critical heart failure in recent years.
- A national registry is a very valuable tool to assess global outcome.