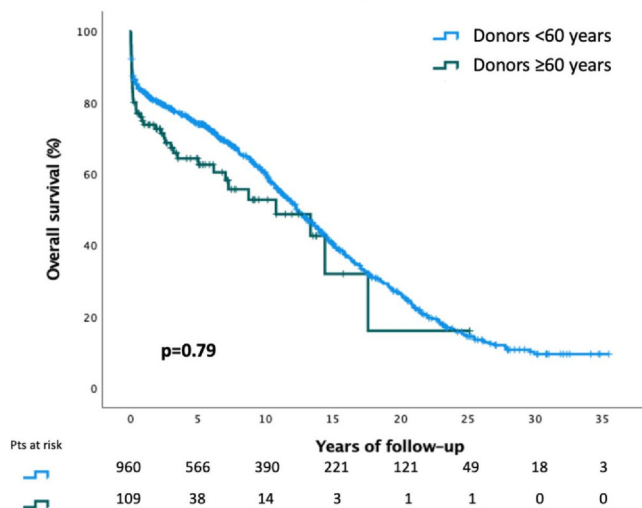


cardiac allograft vasculopathy (CAV) were compared between the two groups.

Results: Of 1069 patients who underwent heart transplantation during the study period, 960 recipients received a donor <60years (Group 1, M recipient/donor 79%/61%, mean recipient age 49 ± 17years, mean donor age 34 ± 15years), and 109 patients received a donor ≥60years (Group 2, M recipient/donor 76%/44%, mean recipient age 61 ± 8years, mean donor age 64 ± 3years). Group 1 donor hearts were more frequently female (p < 0.001), had a lower h/o substance abuse (0.048), and a greater h/o CV risk factors (p < 0.001), coronary artery disease (p < 0.001) and left ventricle hypertrophy (p < 0.017). Group 1 hearts were less frequently allocated to recipients <50years. At a median follow-up time of 7.5years (range 0-35.5), Group 1 patients showed similar late outcomes in terms of overall survival (p=0.79) and freedom from severe CAV (p=0.254) (Figure 1). Increasing donor age ≥60years was not a risk factor for late overall mortality or severe CAV.

Conclusion: In our experience elderly heart donors are associated to increased CV risk factors and are preferentially allocated to older recipients, but they are not associated to long-term increased risk of death or severe CAV. Consequently, older donors might be successfully used in selected recipients in order to expand heart donors pool.

Long-term overall survival in heart transplantation with donors ≥60 years



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Twenty-Minute No-Touch Period Before Controlled DCD Heart Retrieval: Is There Still a Chance for Successful Recovery? The Italian Experience

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Purpose: Hearts from cDCD donors are becoming an increasing source for heart transplantation (HT). Unfortunately, their use has been questioned for years in Italy given the longest-in-the-world no-touch period after death declaration (20 min). We aimed to analyze the early Italian experience using cDCD hearts for transplantation.

Methods: We prospectively collected and analyzed all clinical data of all patients who underwent cDCD HT since ethical approval of the program by the National Transplant Center (CNT) (April 2023), in 5 centers which were authorized to perform cDCD HT.

Results: Since April 2023, 8 cDCD HT were performed (recipient M 100%, median recipient age 58 years, IQR 44-60). Two patients were hospitalized and under inotropes before HT, no patients were on mechanical support before HT. Donor hearts (M 100%, median age 37 years, IQR 23-51) did not present any coronary lesions. Median warm ischemic time (WIT), functional WIT and asystolic time were 53min (IQR 46-62), 42min (IQR 39-44) and 28min (IQR 26-29), respectively. All the cases were performed under TA-NRP (7 CPB, 1 ECMO) through femoral vessels cannulation. No ex vivo machine perfusion devices were used. Median TA-NRP duration was 106min (IQR 86-140). Median time within TA-NRP stop and donor cardiectomy was 56min (IQR 40-126). Median cold ischemic time was 93min (IQR 78-144). Two patients required ECMO; of these, 1 patient was switched to RVAD and was finally recovered. 30-day and in-hospital mortality occurred in only 1 patient. Among the 7 alive patients, only 1 patient presented acute cellular rejection ≥2 after HT. All the alive patients showed preserved ejection fraction (≥55%) and preserved RV function, with only mild tricuspid regurgitation at discharge (Table 1).

Conclusion: Our preliminary data show that cDCD heart transplantation is feasible and safe also with longer donor asystolic times. Additional follow-up data and a larger cohort of patients are required to confirm these promising results.

	Pt #1	Pt #2	Pt #3	Pt #4	Pt #5	Pt #6	Pt #7	Pt #8
Donor age (y)	55	29	23	45	49	21	23	63
Donor gender	M	M	M	M	M	M	M	M
Cause of WLST	Head Trauma	Head Trauma	Head Trauma	Post-anoxic	Post-anoxic	Head Trauma	Anoxia	Head Trauma
WIT (min)	64	52	61	46	44	45	53	64
Agonal phase* - CA (min)	19	20	13	13	10	12	10	19
fWIT (min)	48	45	43	39	38	41	38	43
Asystolic time (min)	34	25	30	26	28	29	28	24
Warm blood coronary reperfusion	yes	yes	yes	no	no	no	no	yes
TA-NRP	CPB	CPB	CPB	CPB	CPB	CPB	ECMO	CPB
TA-NRP duration (min)	79	155	88	117	94	135	41	172
Cold ischemic time (min)	132	74	234	74	79	80	181	105
Recipient's age (y)	45	57	24	59	60	40	60	63
Recipient's gender	M	M	M	M	M	M	M	M
Post-op MCS	no	no	Yes (ECMO-RVAD)	no	no	Yes (ECMO)	no	no
In-hospital mortality	no	no	no	no	no	yes	no	no
EF ≥55% at discharge	yes	yes	yes	yes	yes	-	yes	yes
Preserved RV function at discharge	yes	yes	yes	yes	yes	-	yes	yes

(521)

Out-Of-Hospital Cardiac Arrest Donor (OHCAd) Hearts: A Single-Center Experience

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Purpose: Out-of-hospital cardiac arrest donor (OHCAd) could be an alternative to existing efforts towards increasing the available pool of organs. The objective of this work is to demonstrate how hearts derived from marginal donors with uncontrolled cardiac arrest have a quality that is not inferior in terms of survival compared to hearts originating from standard patients.

Methods: We performed a retrospective analysis in patients who received donor heart transplants with cardiac arrest of 20 minutes or more. From January 2022 to September 2023, 70 cardiac transplants were performed at our cardiac surgery center, of which 74.24% were men (n=52) and 25.76% women (n=18). The two populations showed similar characteristics in terms of risk factors, age, urgency/emergency status, ECMO before HTx.

Results: Patients who received hearts from donors with OHCAd were 12,86% (n=9). Kaplan Meier survival curve shows comparable 30-day survival (p = 0,5) even primary graft failure requiring MCS incidents was comparable (Group OHCAd 22% post-HTx ECMO-VA, Group Control 23% post HTx ECMO-VA, p= 0,98).

Conclusion: OHCAd hearts do not show inferior survival compared to hearts without cardiac arrest in our experience. Longer-term follow-up is necessary to evaluate the survival of such recipients.