training. We further explored the relationship between clinical markers of HF and B-lines assessed with a novel automated B-line counter.

Methods: NPs underwent two hours of didactics followed by 30 proctored exams prior to study initiation. A 6-zone exam (Fig 1A) was performed by one of three NPs utilizing the Butterfly IQ+™ (Guilford, CT) system. Images were reviewed for quality by 2 independent experts with zones defined as good quality (GQ) or poor quality (PQ) based upon an ACEP score of ≥ 3; a 3rd reviewer adjudicated when there was disagreement. B-line scores were generated utilizing an automatic B-line counter. The following HF markers were assessed: Volume status, > 30% increase from baseline NT-proBNP, > 5lb weight gain, PAD above goal (subjects with CardioMEMS™).

Results: Thirty-one subjects (74% M, 26% F, 69 ± 11 yrs) were enrolled from our HF clinic, generating 186 zones for analysis of quality. LUS exams took approximately 5 mins. Across all zones, 90% of all images were GQ, with no difference in quality between the dependent and non-dependent zones. In two thirds of subjects, all zones assessed were of GQ and only 16% of subjects had > 1 PQ zone. This study cohort was well compensated with only 39% showing any of the 4 markers of HF. Weight gain was the only individual HF marker associated with the presence of B-lines (≥ 3 B-lines, $p < 0.05$). Fig 1B shows the distribution of HF (defined as at least one HF marker) by number of B-lines. Subjects with ≥ 3 B-lines were significantly more likely to have HF ($p < 0.01$), and no subjects without B-lines had HF.

Conclusion: HF NPs can rapidly perform high quality LUS after a short period of training. The absence of B-lines confirms euvolemia and can be a useful additional tool in the clinic.

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Essential Strategies to Sustain the First Cardiac Transplant Program in an Ultraperipheral Region: Extended Criteria Donor Hearts and Donation After Circulatory Death

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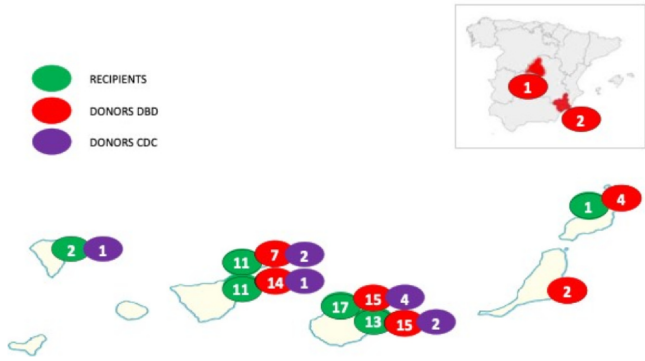
Purpose: Cardiac transplant (CT) programs in distant regions face challenges in accessing donated organs. Therefore, it is necessary to explore and implement innovative strategies to expand the donor pool. Extended-criteria donor hearts (ECDH) and donation after circulatory death (DCD), are recommended approaches. This study aims to examine the donor pool composition and early outcomes of a new CT program in an ultra-peripheral European region.

Methods: Retrospective, observational, single-center study of all consecutive CTs from the start of the program on NOV2019 to JUL2023. ECDH were defined as donors aged > 50y, abnormal echocardiograms, cold ischemic times > 240min and/or donors with extracorporeal membrane oxygenator (ECMO). DAC were CT performed using in-situ preservation with normothermic thoraco-abdominal regional perfusion.

Results: Seventy de novo CT were performed using the bicaval technique. Mean donor age was 45.5 y and 89% male. ECDH were 28 (37.2%) aged ≥50 y, 13 (18.6%) had abnormal echocardiogram, 5 (7.1%) had > 240min ischemic time, two donors were on ECMO. ECDH constituted 30 (43%) of the hearts, and ten (14%) were from DCD donors. From transplant area were 96% (3 donors from mainland Spain, image) and mean ischemic time was 151 min (70-305). Five (7%) recipients suffered primary graft dysfunction and 5 had stenosis ≥ 50% in epicardial coronary arteries in coronary-angiogram post-CT (1 underwent percutaneous intervention at 30 days). The 30-days and 1-year survival rates were 96% and 93% respectively. Image: Number and origins of recipients and donors, and type of donation.

Conclusion: The first CT program in an ultraperipheral region appears to successfully expand donor pool with a significant contribution of ECDH and DCD. These strategies have improved CT activity and established a self-sufficient program, with promising early term results.



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Outcomes with Normothermic Regional Perfusion: Comparison with Core-Cooling During DCD Heart Transplantation

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Purpose: The characteristics of normothermic regional perfusion (NRP) during donation after circulatory death (DCD) for heart are unclear in the US. NRP offers early reperfusion and in-situ functional assessment of the donor heart.

Methods: UNOS database was analyzed for adult heart transplants with reported DCD donors from Dec 2019 to July 2023. Data is reported as median (interquartile range).

Results: Total 904 adult DCD heart transplants with reported retrieval technique were identified [NRP (n=108) vs. core-cooling (CC, n= 796)]. Re-transplant and multi-organ recipients were excluded from outcome analysis. Listing status 1 and 2 were similar in both groups (NRP vs CC- 3% vs 2% and 29% vs 33% respectively). Durable mechanical support (LVAD, RVAD, TAH) were similar in both groups pre-transplant (47% vs 35%, p=0.2). There was no difference in days on waitlist (42 vs 34 days, p=0.2). Simultaneous renal transplant rates in recipients were similar (6% vs 8%). Heart retrieval to successful transplant rates were similar (88% vs 92%). Simultaneous extra-cardiac organ retrieval rates were similar- kidney retrieval in 97% vs 95%, p= 0.5 and liver in 53% vs 59%, p= 0.2. Data is summarized in table 1. The NRP adoption across UNOS regions is not uniform and ranges from 0% to 17% (figure 1A). In the available post-transplant follow up period (median 208 days for both groups), no difference was noted in the length of stay or rejection episodes prior to discharge. One year survival was comparable- 91% after NRP and 93% after CC (figure 1B).

Conclusion: NRP is being utilized in certain centers in the US with outcomes comparable to other DCD techniques.

Table 1: Comparison of characteristics between NRP and core-cooling

	NRP	Core-cooling	P-value
Recipient age	56 (42 - 64)	57 (47 - 64)	0.786
Blood type O recipient	54 (50%)	407 (51%)	0.438
Days on waitlist	42 (16 - 330)	34 (10 - 150)	0.166
Durable LVAD prior to transplant	37 (36.2%)	208 (26.8-%)	0.229
All ventricular assist device	46 (46.9%)	260 (35.0-%)	0.193