



IS THERE A “WEEKEND EFFECT IN MULTIORGAN TRANSPLANTATION?

RR Chand¹, CJ Lum², A Vaidya³, K Pandaya³, D Vucicevic⁴, E DePasquale³
1:Harbor-UCLA Medical Center, 2:The Queen's Medical Center, 3:Keck USC Medical Center, 4:Ronald Reagan UCLA Medical Center



BACKGROUND

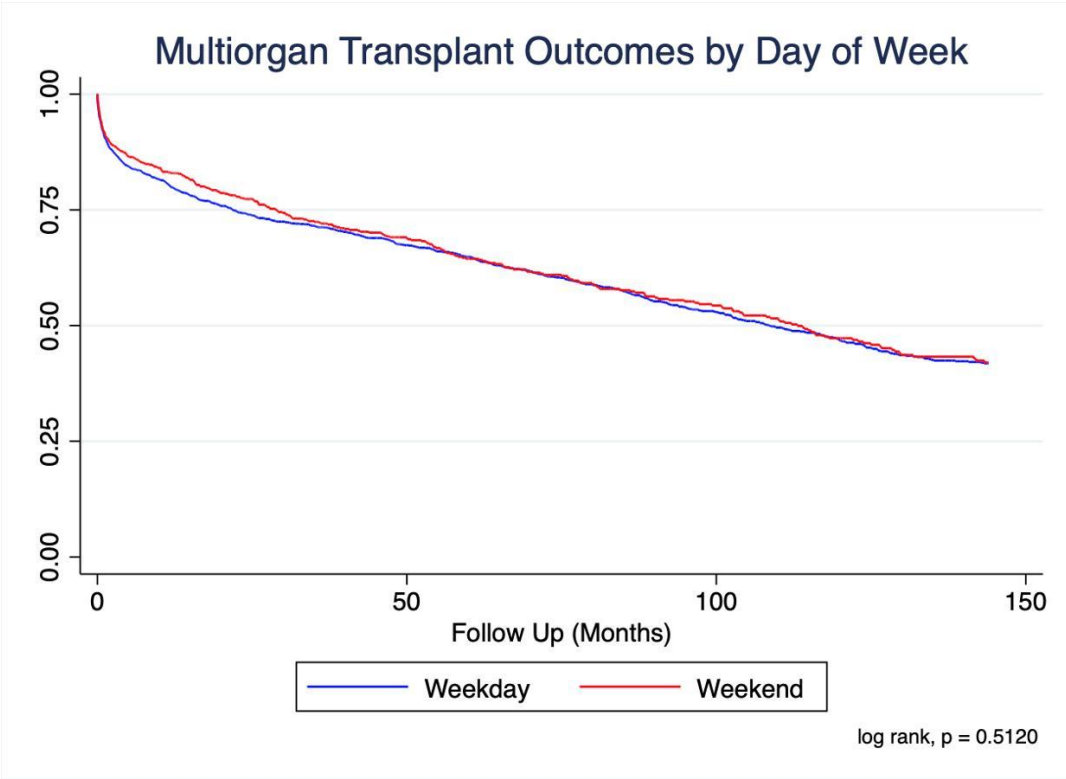
Multiple organ transplant surgeries may be adversely affected by the timing of the surgery. The United Network of Organ Sharing (UNOS) Organ Registry collects data for all organ transplants performed in the United States of America and can be used to analyze outcomes for multiorgan transplantation.

METHODS

We conducted a retrospective cohort analysis of the UNOS Organ Registry for all multi-organ (i.e. heart and other organ(s)) transplants from 1987 to 2019, comparing mortality rates between weekday transplants (WDT) versus weekend transplants (WET). A multivariate Cox proportional hazard regression analysis was used, adjusting for age, sex, diabetes, race, ischemic time, need for dialysis, need for life support, waitlist time, and HLA mismatch. The exclusion criteria included age <10, patients lost to follow-up, and re-do heart transplants. Survival was censored at 10 years.

DATA/GRAPHS

	WDT (%)	WET (%)	P-value
Total #	2158	804	
Age ± SD	48.1 ± 13.4	47.8 ± 13.5	0.57
Male	1438 (66.6)	508 (36.8)	0.078
White/Caucasian	1415 (65.6)	515 (64.1)	0.17
DM	568 (30.3)	182 (26.6)	0.076
Donor Age ± SD	30.4 ± 12.0	30.1 ± 11.9	0.57
Ischemic Time			0.19
0-1hr	242 (11.7)	86 (11.1)	
2<3hr	617 (29.8)	248 (31.9)	
3<4hr	715 (34.5)	284 (36.6)	
4+hr	497 (24.0)	159 (20.5)	
On Life Support (all)	1224 (56.8)	441 (54.9)	0.35
On Life Support (IABP)	124 (5.7)	50 (6.2)	0.63
On Life Support (vent)	64 (3.0)	25 (3.1)	0.84
VAD	367 (17.0)	118 (14.7)	0.13
Total Days on Waitlist (+ inactive), mean	119	111	0.35
Status			0.40
Inactive	4 (0.2)	0 (0)	
1	1212 (73.3)	426 (72.1)	
2	438 (26.5)	165 (27.9)	
Smoking	639 (29.6)	215 (26.7)	0.13
PRA	55 (10.2)	18 (8.0)	0.34
Non-CV Death	781 (79.7)	270 (74.8)	0.053
CV Death	199 (20.3)	91 (25.2)	0.053



RESULTS

2,518 patients received multiorgan transplants on a weekday versus 804 patients during the weekend. The 10-year overall mortality of WDT and WET was 53.2% and 52.7%, respectively (p=0.5120). Although there was trend for higher non-cardiovascular death in the WDT group versus the WET group (79.7% and 74.5% respectively) and higher cardiovascular death in the WET group versus the WDT group (25.2% and 20.3% respectively), the difference did not meet statistical significance with p=0.053.

CONCLUSIONS

Based on this analysis, there was no significant mortality “Weekend Effect” observed for multiorgan transplant surgeries.

DISCLOSURES

None