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A Review of Organ/Tissue Donation in Out of Hospital Cardiac Arrest Patients at an Academic Community Hospital

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Introduction

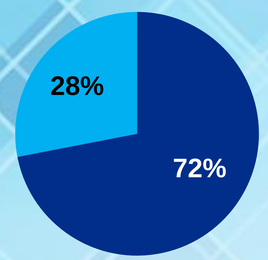
This study sought to review information on organ/tissue donation in out of hospital cardiac arrest (OHCA) patients over a 4.5 year period from January 2011-May 2015. The current national survival to discharge rate of OHCA patients is low (9.5% according to the AHA)[1]. Likewise the demand for organs and tissue is not currently matched with donations[5]. While most OHCA patients can donate only tissue (instead of organs) due to US policy[7], there is a possibility that, with a policy change and the use of ECMO, the donor pool could be expanded to meet the current demand[2,4].

Methods

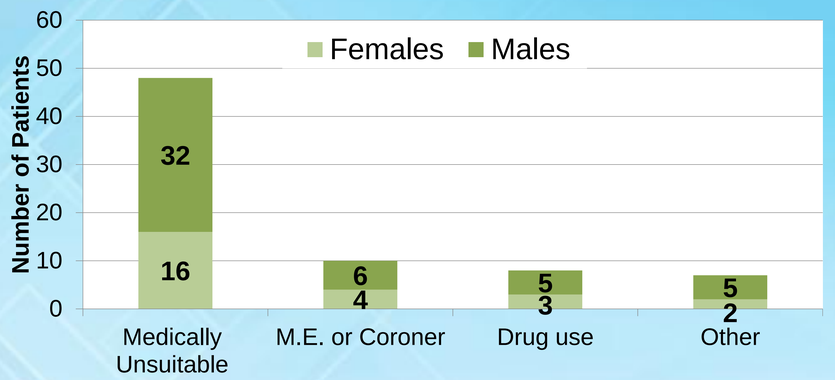
A retrospective chart review was performed for patients with OHCA between the ages of 18 and 70 at time of admission. The patients' eligibility for organ/tissue donation was recorded, as well as the reason for their ineligibility if applicable. Other data included were if the patient actually donated, reason for not donating, and the specific tissue and/or organs donated. Patients were then excluded from the study if they did not have both eligibility data, and donation data. From this cohort of 378 patients, descriptive statistics were utilized to depict the aspects of patient eligibility and donation information.

Results

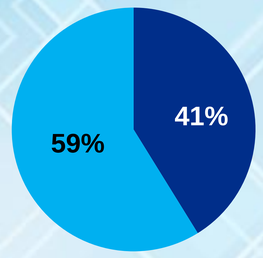
Patient Eligibility to Donate



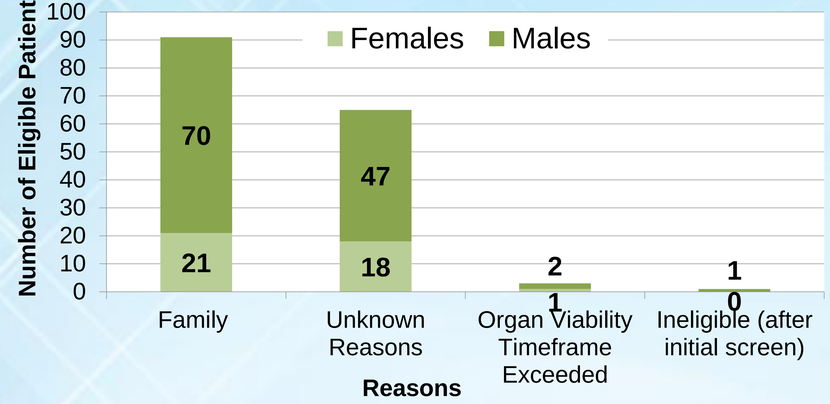
Reaons for Donation Ineligibility



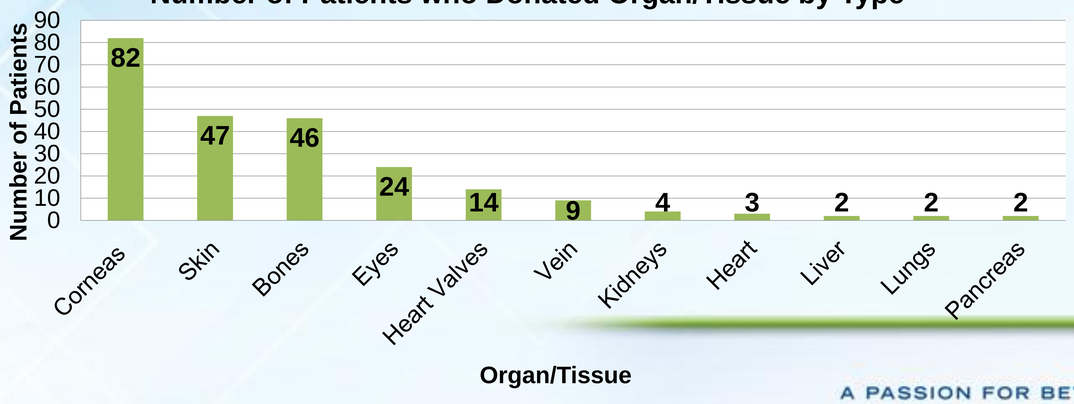
Eligible Patient Donations



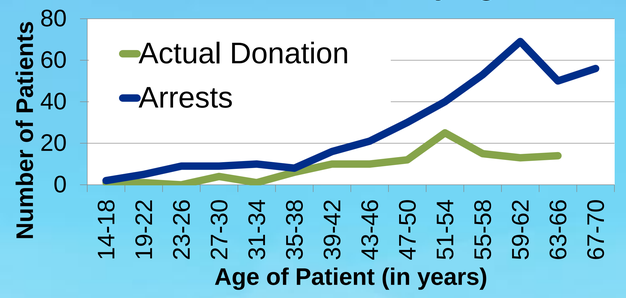
Reasons for Eligible Donors Not Donating



Number of Patients who Donated Organ/Tissue by Type



Comparison of Organ/Tissue Donation with Arrests by Age



Conclusions

From this review, it can be seen that the rate of organ donation does not match the rate of cardiac arrest, and that family refusal is the most common reason for eligible patients not donating. While there is a law currently being introduced in Pennsylvania that would remove the need to gain consent from the family of a known donor[6], other solutions should be pursued. Perhaps these families would benefit from more education on organ donation[3]. Further research could also be pursued to expand the organ donor criteria, considering many patients were only able to donate tissue.

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