Early Outcomes Using Hepatitis C-positive Donors for Cardiac Transplantation in the Era of Effective Direct-Acting Antiviral Treatments

Vanderbilt University Medical Center, Nashville, TN

Background

- Shortage of suitable donor hearts contributes to prolonged wait list times, increased reliance on mechanical circulatory support, and higher wait list mortality
- Direct-acting antiviral (DAA) therapies for hepatitis C (HCV) are well tolerated, with few drug-drug interactions and excellent rates of viral clearance

Objective

- To describe early safety and efficacy outcomes using HCV-positive donors for cardiac transplantation

Methods

PATIENT SELECTION
Waitlisted patients discussed case-by-case by multidisciplinary team

IMMUNOSUPPRESSION
OHT
Triplet drug therapy, per our standard protocol (FK, MMF, steroids)

SURVEILLANCE & TREATMENT
Hepatology referral
DIC
HCV infection
- genotype 1
- genotype 3

Donors considered HCV positive if:
- HCV antibody positive, or
- HCV nucleic acid testing positive

12 weeks ledipasvir-sofosbuvir
12-24 weeks sofosbuvir-velpatasvir

DATA COLLECTION & ANALYSIS
Ongoing

Results

- 9 acquired HCV, initiated DAA, suppressed viral load
  - 1 death due to PE during week 7 of DAA therapy
- 12 HCV naive
  - OHT from HCV+ donor
  - Mean time to OHT 11 days
- 8 completed DAA therapy
- 1 HCV non-naive
- 4 remain free of HCV
  *following consent to consider HCV+ donors

CONCLUSIONS

- In the era of DAAs, HCV+ donors may be a safe and effective way to expand the donor pool and reduce wait list times
- While most recipients of HCV+ donors will acquire HCV infection, DAAs:
  - Well tolerated
  - Lead to rapid viral load suppression, despite immunosuppression

The authors have no relevant disclosures