Report Primary Graft Dysfunction in Heart Transplant Recipients

OPTN Heart Transplantation Committee

Purpose of Proposal

- Primary Graft Dysfunction (PGD) results in poor post-transplant outcomes
- Although 2013 ISHLT consensus conference developed classification system, the heart community continues refining PGD definition
- OPTN post transplant data collection proposed to:
  - Identify PGD in heart recipients
  - Understand impact of PGD on post-transplant survival

Proposed TRR Heart Data Elements

Data Element	Values and/or Ranges
Primary Graft Dysfunction	Yes or no
Left Ventricular Dysfunction	Yes or no
Right Ventricular Dysfunction	Yes or no
Left Ventricular Ejection Fraction	Percentage
Right Atrial Pressure (RAP)	mm Hg
Pulmonary Capillary Wedge Pressure (PCWP)	mm Hg
Pulmonary Artery Systolic Pressure / Pulmonary Artery Diastolic Pressure	mm Hg
Cardiac Output	Liters / minute
Support Device	Yes or no
If Yes	Right, left, or biventricular
Type of Device	Device name(s)
Inotrope support	Drug(s) and range dosages
Nitric Oxide following transplant	Yes or no
Flolan following transplant	Yes or no

Inotrope and Vasopressor Ranges

Inotrope	Dose (mcg/kg/min)
Epinephrine	• None • >0 – ≤ 0.05 • >0.05 – ≤ 1.0 • >1
Milrinone	• None • >0 – ≤ 0.3 • >0.3 – ≤ 0.5 • >0.5
Dobutamine	• None • >0 – ≤ 3 • >3 – ≤ 7.5 • >7.5
Dopamine	• None • >0 – ≤ 3 • >3 – ≤ 7.5 • >7.5

Vasopressors	Dose (mcg/kg/min)	Dose (mcg/min)
Levo (Norepinephrine – Levophed)	• None • >0 – ≤ 0.05 • >0.05 – ≤ 0.1 • >0.1	• None • <5 • 5 – < 12 • ≥12
Vaso (Vasopressin – Pitressin)	--	• None • >0 – <0.05 • 0.05 – <0.08 • ≥0.08
Neo (Phenylephrine – Neosynephrine)	--	• None • >0 – < 100 • 100 – <200 • ≥200

Proposed removal from the Heart TRR

- Airway Dehiscence

Member Actions

- Transplant hospitals will be required to collect and report data on all heart recipients at 24 and 72 hours (+/- 4 hours) after patient's arrival to ICU

What do you think?

- Are there additional data elements that should be considered for inclusion? Exclusion?
- Do any of the proposed data elements create unreasonable burden? Would any modification significantly reduce the level of effort required to collect and report?
- Are 24 and 72 hours (+/- 4 hours) following patient's arrival to ICU appropriate time points for PGD data collection?
- Are the proposed ranges and units of inotrope and vasopressor dosing appropriate?
- Are there differences and/or similarities between adult and pediatric PGD that should be considered?