

Focused US for Donor assessment

Update

NODC 09.02.2022

Focused US for Donor assessment

Background

- Presented at CTAG & RAG March 2021
 - Focused US as additional information at time of offer.
 - Focused US to rule out rather than rule in.
 - When TTE difficult to obtain Focused US might be considered. Particularly for DBD as further assessment will occur anyway.
 - FICE as additional tool for donor optimisation.
 - Not a 24/7 service but wider cover in ICU. More than 1500 accredited ICU staff
 - Anecdotal stories of donation proceeded based on Focused US.

Focused US for Donor assessment

Working group and goals

- *H. Buglass - RCLOD*
- *T. Billyard - RCLOD*
- *R. Mildner - RCLOD*
- *M. Ryan - RM NHSBT*
- *M. Berman - Clinical NORS lead*
- *A Rubino - RCLOD*
- *C. Goedwolk - CLOD PICU*

- *A. Waqas - ST10 Cardiology & Intensive Care*
- *R. Gil Fernando - Transplant cardiologists*
- *H S Aboumarie - CLOD, EACVI*
- *L Marshall - ST7 Intensive Care*
- *M. Peck - FUSIC ICS*
- *A. Miller - FUSIC ICS*
- *H. Conway - ACCP*

1. Audit and current practice
2. Echo assessment
3. Study transfer and communication

Focused US for Donor assessment

Audit and current practice

- Focused Echo for screening of potential heart donors survey:
 - <https://www.surveymonkey.co.uk/r/PFQWCKD>
- Surgical Audit: <https://forms.office.com/r/hKKcaFAwEJ>



- SNOD Audit: <https://forms.office.com/r/Bq0FKnewNg>



Focused US for Donor assessment

Echo assessment

- Donor Heart focused echo assessment
 - Focused echo as rule out
 - Biventricular function
 - Valvular pathology
 - IVS and PW thickness

v2 January 2022

Donor Heart Transthoracic Echo Assessment

Echocardiography in this situation can be difficult but we would be very grateful if you are able to attempt this minimum dataset for the assessment of potential heart donors.

Parasternal long axis

- 1) 2D
- 2) Colour over aortic valve
- 3) Colour over mitral valve
- 4) Measure*: Intraventricular septum thickness
Posterior wall thickness,
End diastolic LV diameter
End systolic LV diameter
Aortic root

Subcostal

- 16) 2D
- 17) Colour over inter-atrial septum

Parasternal short axis

- 5) 2D Aortic level
- 6) Colour over tricuspid
- 7) Colour over pulmonary valve
- 8) 2D Mitral level
- 9) 2D Papillary muscle level
- 10) 2D Apical level

Summary

Please record inotrope/vasopressor levels at time of echo and PEEP on ventilator

Comment on LV/RV function, valvular pathology, Wall thickness IVS and PW*

If you are uncertain or unaccredited please share images you have taken on teams

Apical 4 Chamber

- 8) 2D
- 9) Colour over mitral valve
- 10) Colour over tricuspid valve
- 11) Measure*: RV basal diameter

Advanced

If you are able to perform a complete BSE Level 2 Echo this would be ideal.

Please record LVEF, regional wall abnormalities, RV function and any valvular abnormalities with quantification.

Many changes occur at end of life and do not necessarily preclude transplantation e.g RWMA

Apical 5 Chamber

- 12) 2D
- 13) Colour over aortic valve

* See overleaf for how to make measurements

Focused US for Donor assessment

- Heart Transplant champion
 - Pilot
 - Imaging transfer and remote review

