

Approved v2.0 Oct 23

# Donor Heart Transthoracic Echo Assessment

*If you are fully accredited please scan & report the echo as per BSE standards.*

*If you are focused echo accredited (i.e. Fusic Heart or Level I BSE), please scan and report as per your accreditation standards, consider recording the following 18 views is possible and transfer images to transplant centre.*

*Remote Image review is essential in all cases.*

## 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

## Subcostal

- 17) 2D
- 18) 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

## Reporting

If you feel able please comment on following:

Inotrope/vasopressor level:  
PEEP on ventilator:

LV function: normal/impaired/severely impaired/NA  
RV function: normal/impaired/severely impaired/NA  
Aortic valve: normal/stenotic/regurgitant/NA  
Mitral valve: normal/stenotic/regurgitant/NA  
Tricuspid valve: normal/stenotic/regurgitant/NA  
Pulmonary valve: normal/stenotic/regurgitant/NA  
Other (eg VSD/effusions):

LV diameter (cm):  
LV septal wall thickness (cm):  
LV posterior wall thickness (cm):  
RV basal diameter (cm):

Please transfer images to transplant center

## Apical 4 Chamber

- 11) 2D
- 12) Colour over mitral valve\*
- 13) Colour over tricuspid valve\*
- 14) 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

- 15) 2D
- 16) Colour over aortic valve\*

\* See overleaf for how to make measurements

## Parasternal long axis measurements

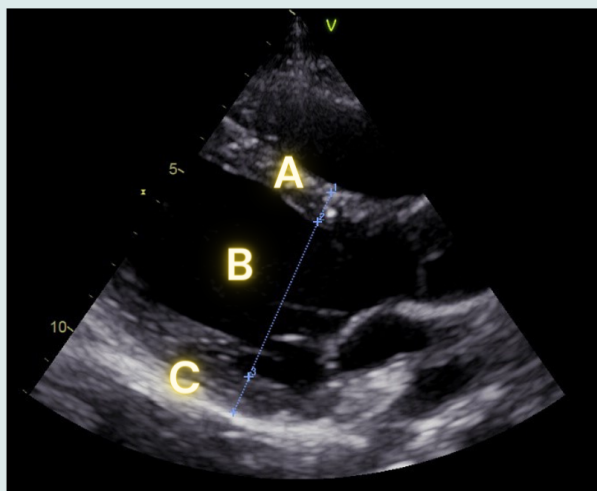
Measure these parameters in diastole  
(when the LV is the biggest)

**A** Intraventricular septum thickness

**B** End diastolic LV diameter

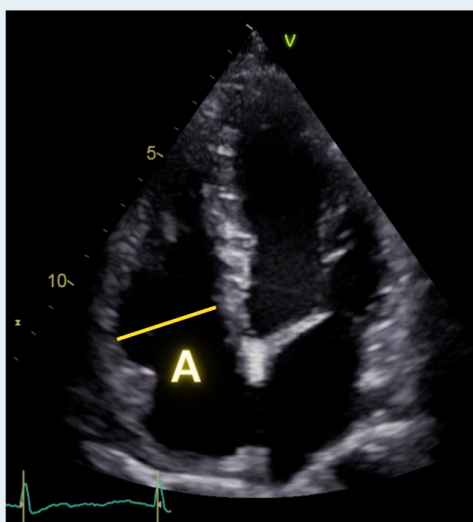
**C** Posterior wall thickness

(Consider end systolic LV diameter)



## Apical 4 Chamber measurement

**A** RV basal diameter in diastole (when RV is biggest)



## Colour Nyquist Limit



When taking colour images ensure the colour scale Nyquist limit is set between 50–60cm/s.

A wide box to capture any valvular lesion is useful but too wide & the image frame rate will reduce