



Case Study Submission Requirements: Fetal Echocardiography

[Click to download FeEcho Case Study Template for PowerPoint](#)

From the main site

Submit a total of **3 NORMAL** fetal echo cases showing ALL components in the [practice parameters](#) with their corresponding final reports as outlined below:

- **ALL** anatomic structures or designated views must be labeled (e.g. 4 chamber view, 3V-trachea view, short axis ventricles, etc.)
- **ALL** required items listed under *Gray Scale Imaging* and *Color Doppler Ultrasound* in the practice parameters must be demonstrated and labeled.
- *Pulsed Doppler Ultrasound*: evaluation of the atrioventricular valves, semilunar valves, pulmonary veins, and the ductus venosus is required.
- *Heart Rate and Rhythm Assessment*: M-mode evaluation of heart rate demonstrating the atria, ventricles, and their relationship to each other is required.
- *Cardiac Biometry*:
 - **Biometry of the four cardiac valves is now required.**
 - Additionally, for the purpose of accreditation, **cardiac biometry of the following components must also be demonstrated and labeled in at least ONE of your NORMAL case submissions**: the ventricular lengths, outflow tracts including the branch pulmonary arteries, atria and ventricular dimensions and cardiothoracic ratio. (See page 2 for imaging checklist.)
- *Video Clips*: **In addition to the still images, the following clips are required (keep clips short and do not send extra videos for review)**:
 - One comprehensive clip (or 4 separate clips) of an axial sweep from stomach to 3VTV demonstrating 1.) situs, 2.) atrioventricular junction, 3.) ventriculoarterial junction, 4.) 3VV and 3VTV.

From each additional site or mobile unit:

Submit **1 NORMAL** fetal echo case with its corresponding final report:



Refer to the description for a NORMAL case submission as described for the main site.

And, from any site

Submit **1 ABNORMAL** fetal echo study containing a major structural congenital heart defect involving one of the 4 chambers and/or outflow tracts (e.g. HLHS, ToF, TGA, AV Canal, Ebstein anomaly, etc.) with its corresponding final report:

- **For the purpose of accreditation, the following ARE NOT considered to be major structural anomalies**: *isolated arrhythmia, isolated VSD (or ASD), echogenic intracardiac focus, isolated pericardial effusion.*
- *Video Clips*: **In addition to the still images, the following clips are required (keep clips short and do not send extra videos for review)**:
 - One comprehensive clip (or 4 separate clips) of an axial sweep from stomach to 3VTV demonstrating 1.) situs, 2.) atrioventricular junction, 3.) ventriculoarterial junction, 4.) 3VV and 3VTV.
 - Additional video clips of any salient features (positive and negative) of the cardiac pathology contributory in determining the final diagnosis.

Additional Notes:

- **DO NOT SEND an unedited video of the entire exam.** If your practice only stores video (and not 2D images) or if you find your cases or video files exceed 50 MB each, contact us at accreditation@aium.org for assistance.
- **Refer to the Accreditation Application Manual for additional case study submission requirements.**
- **Only case studies with an ultrasound indication, listed in the relevant practice parameters, will be accepted. (Non-indicated exams will not be accepted.)**

Imaging Checklist

Normal Fetal Echo

Video Clips (required) – may be submitted as a single comprehensive clip of an axial sweep from stomach to 3VTV, or as 4 separate clips as listed below:

- 1. Short, labeled **video clip** of visceral / abdominal situs
- 2. Short, labeled **video clip** of atrioventricular junction
- 3. Short, labeled **video clip** of ventriculoarterial junction between the ventricles and the great arteries
- 4. Short, labeled **video clip** of the 3VV and 3VTV

Labeled, still images of the following:

- 5. Four chamber
- 6. Left ventricular outflow tract
- 7. Right ventricular outflow tract
- 8. Branch pulmonary artery bifurcation
- 9. Three-vessel and trachea
- 10. Short axis views of ventricles
- 11. Short axis views of outflow tracts
- 12. Aortic arch (sagittal view)
- 13. Ductal arch (sagittal view)
- 14. SVC and IVC entering RA (bicaval view)

M-Mode

- 15. M-mode assessment of rhythm

Doppler

- 16. Color **and** spectral Doppler of the pulmonary veins (right and left)
- 17. Color Doppler of the foramen ovale
- 18. Color **and** spectral Doppler of the tricuspid valve
- 19. Color **and** spectral Doppler of the mitral valve
- 20. Color **and** spectral Doppler of the pulmonary valve
- 21. Color **and** spectral Doppler of the aortic valve
- 22. Color Doppler of the aortic arch
- 23. Color Doppler of the ductal arch
- 24. Color Doppler of the SVC and IVC
- 25. Color **and** spectral Doppler of the ductus venosus

Cardiac Biometry – 26, 27, 28 are REQUIRED. 29-38** MUST also be demonstrated in at least ONE of your normal case submissions.

- 26. Aortic artery diameter at the level of the valve annulus in systole **(REQUIRED)**
- 27. Pulmonary artery diameter at the level of the valve annulus in systole **(REQUIRED)**
- 28. Dimensions of tricuspid and mitral valve annulus in diastole **(REQUIRED)**
- 29. Aortic and/or isthmus diameter**
- 30. Main pulmonary artery and/or ductus arteriosus diameter**
- 31. Right and left ventricular lengths**
- 32. End-diastolic ventricular dimensions just inferior to the AV valve leaflets**
- 33. Thickness of ventricular free walls**
- 34. Interventricular septum just inferior to the AV valves**
- 35. Systolic dimensions of the ventricles**
- 36. Transverse diameters of the atria**
- 37. Diameter of the branch pulmonary arteries**
- 38. Cardiothoracic ratio**

Changes made to this document since previous version:

7/24/24	added requirement for proper exam indication
5/21/24	added link to Powerpoint case study templates