

Course Materials

Printed material will be handed out during each lecture and will include the detailed syllabus and learning points for the lesson. Students will be encouraged to read the following as well:

Recommended Textbooks

Echocardiography in Pediatric and Adult Congenital Heart Disease

by Benjamin W Eidem, Frank Cetta, Patrick W O'Leary. Lippincott Williams & Wilkins (2009)

Moss and Adam's Heart Disease in Infants, Children and Adolescents.

Volumes 1 and 2. By Hugh D. Allen, David J. Driscoll, Robert E. Shaddy Philadelphia : Wolters Kluwer Health/ Lippincott Williams & Wilkins (2008)

Class Participation

Class participation will be encouraged and there will be a short quiz at the end of each lecture that will help the students to apply and synthesize the syllabus and self analyze their level of understanding.

Snacks will be provided!

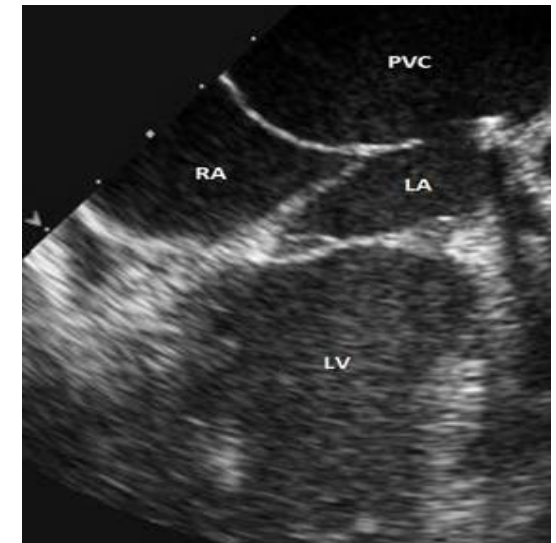


Course Objectives

1. To define anatomy of various congenital heart defects
2. To describe the echocardiography findings in various congenital heart defects
3. To describe the various surgical procedures for palliation and repair of congenital heart defects
4. To describe the echocardiography findings in various surgical procedures



PEDIATRIC CARDIOLOGY ECHOCARDIOGRAPHY LECTURE SERIES



**Heart and Vascular Institute
3rd Floor, Conference Room A&B,
HVI 3.103
6411 Fannin Street, Houston
Memorial Hermann Hospital
Texas Medical Center**

**Alvin Community College
DCVS Program**

**3110 Mustang Road
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RSVP: Jessica Murphy: 281-756-5650
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Speakers: Monesha Gupta MBBS,
FAAP, FACC, FASE
Credentials: Pediatric Cardiologist

Course Information/ Description

Various types of congenital heart defects exist, and pediatric echocardiography requires knowledge of the anatomy of these defects and the other lesions associated with the defects. Based on this knowledge, there are specialized technical skills in obtaining the correct images to demonstrate the anatomy. This is followed by correct interpretation of the physiology of the lesions and knowledge of which surgical procedure is required to either palliate or repair the anatomical defect. Furthermore, once the surgery has occurred, the knowledge of correct images need to be obtained to demonstrate the surgery and evaluate for the complications following the surgery. Lastly, the technician should also have the knowledge of the long-term complications associated with defects and be able to demonstrate them by means of echocardiography. This course is intended to demonstrate these features of congenital heart defects with a focus on the echocardiographic skills.

Syllabus: The lectures series will include the following titles

- Visceral and cardiac situs and cardiac nomenclature physiology of congenital heart defects and its interpretation via an echocardiogram
- Intracardiac shunt lesions and their repair
- Patent ductus arteriosus and persistent fetal circulation
- Coarctation of aorta
- Interruption of aortic arch
- Hypoplastic left heart syndrome
- Vascular rings and slings
- Tetralogy of Fallot
- Double outlet right ventricle
- Total anomalous pulmonary venous return
- Truncus arteriosus and hemitruncus
- Tricuspid atresia
- D-transposition of great arteries
- L-transposition of great arteries
- Coronary artery anomalies
- Ebsteins anomaly
- Mitral stenosis and supramitral stenosing ring
- Congenital mitral regurgitation
- Partial anomalous pulmonary venous return
- Heterotaxia syndrome
- Aortic valve disease
- Double inlet left ventricle
- Systemic venous anomalies
- Cor triatriatum
- Shones syndrome
- Pulmonary valve stenosis and pulmonary artery anomalies
- Pulmonary atresia and intact ventricular septum
- Fetal echocardiography Part I – anatomy & physiology
- Fetal echocardiography Part II – congenital heart defects
- Fetal echocardiography Part III – rhythm abnormalities

Course Calendar/Schedule: SECOND TUESDAY every 2 months (1.5 hours) 1.0 CME Each Class

2/9/10	6 -7:30 pm	Visceral and cardiac situs and cardiac nomenclature
4/6/10	6-7:30 pm	Intracardiac shunt lesions and their repair
6/8/10	6-7:30 pm	Patent ductus arteriosus and persistent fetal circulation
8/10/10	6-7:30 pm	Coarctation of Aorta
10/12/10	6-7:30 pm	Hypoplastic left heart Syndrome
12/14/10	6-7:30 pm	Vascular rings and slings
2/8/11	6-7:30 pm	Tetralogy of Fallot
4/12/11	6-7:30 pm	Heterotaxia Syndrome
6/14/11	6-7:30 pm	Double outlet right ventricle

Alvin Community College

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