ACOi

2022 Hospital Medicine Update
May 11-14

Bedside Ultrasound: Useful Echo Techniques

Peter Bonadonna

Disclosures

- I own a LLC that trains all levels of healthcare providers in Point Of Care Ultrasound (POCUS)

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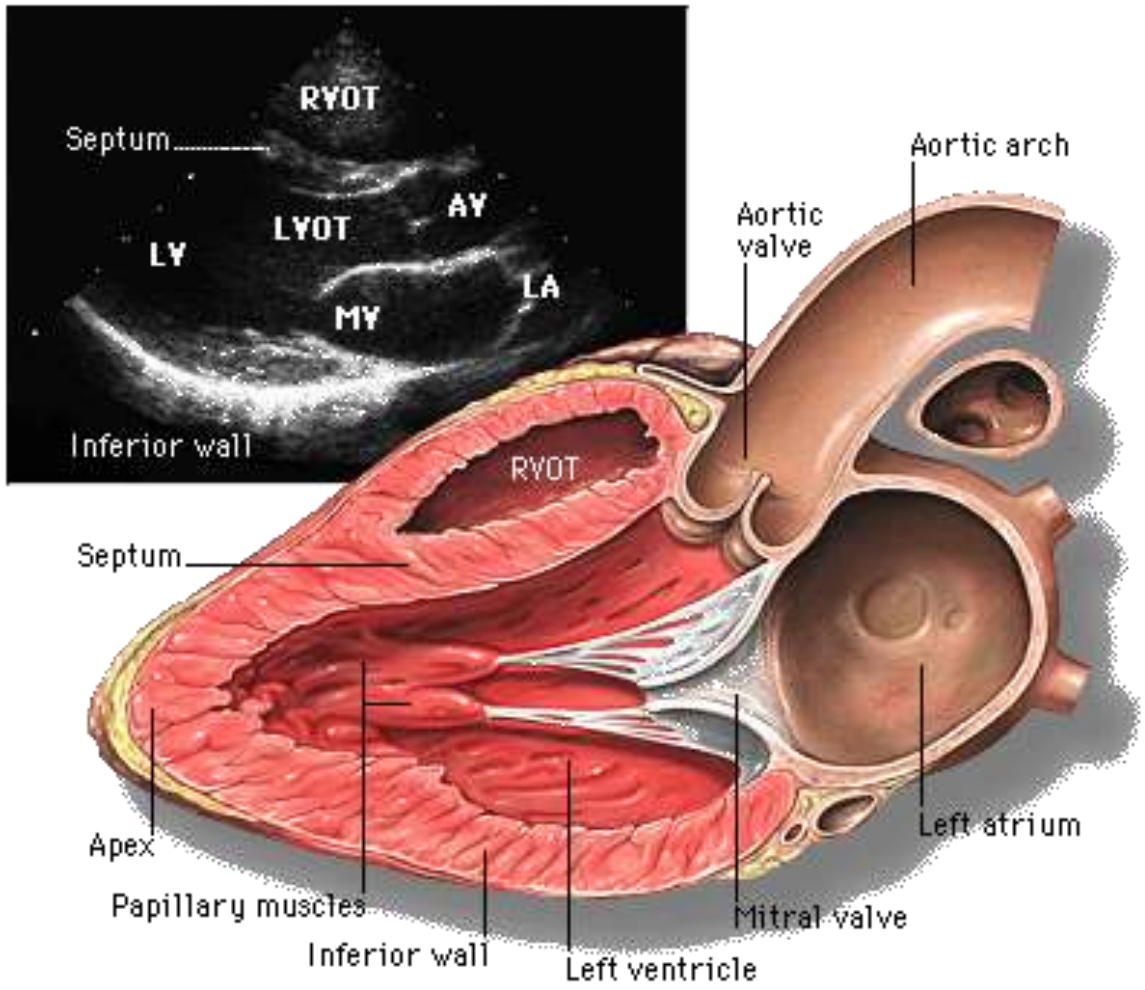
ParaSternal Long Axis View

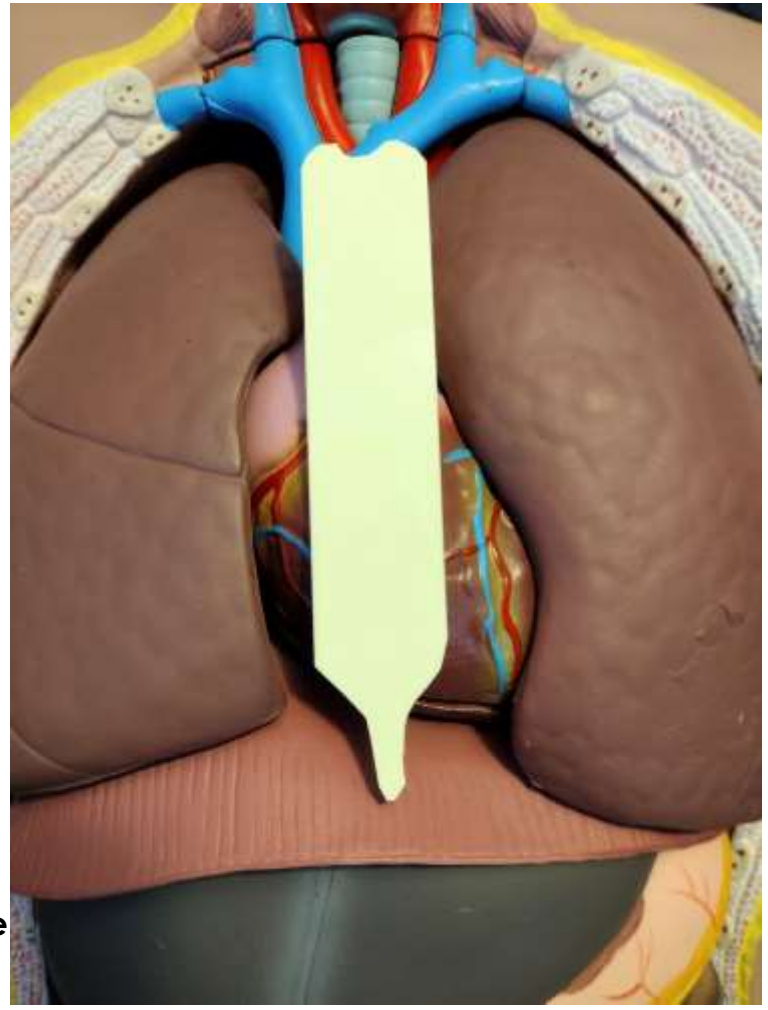
PSLA

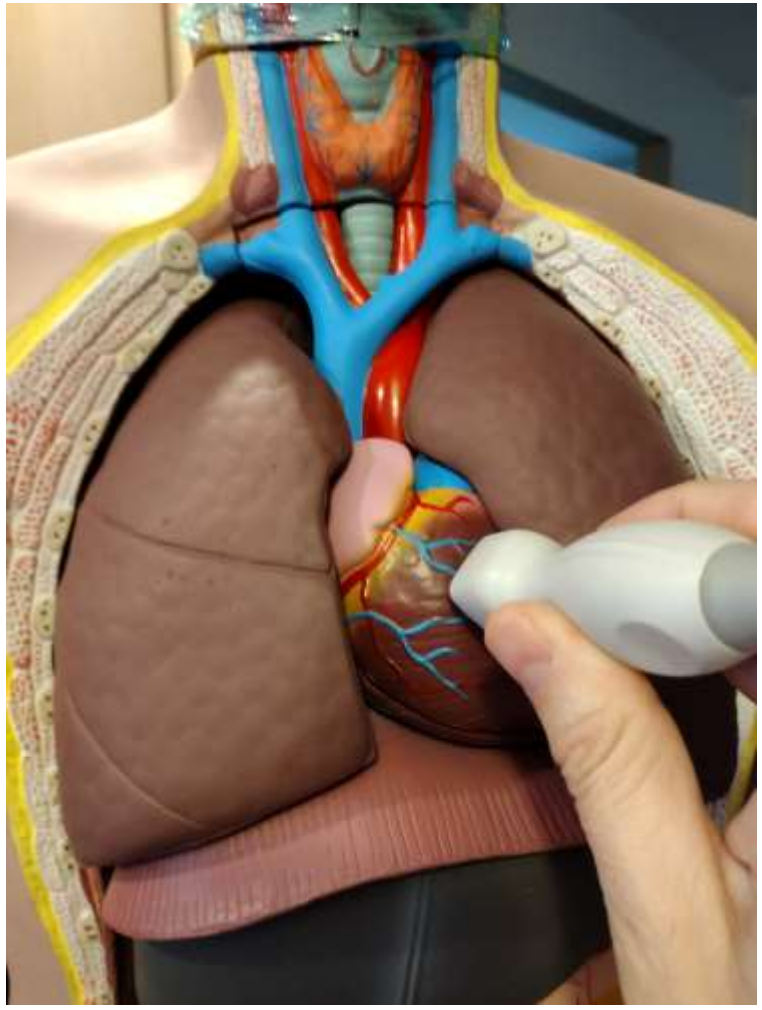

RVOT
Septum
AV
LVOT
LV
LA
MV
Inferior wall
Aortic arch
Aortic valve
RVOT
Septum
Apex
Papillary muscles
Inferior wall
Left ventricle
Mitral valve
Left atrium

PSLA

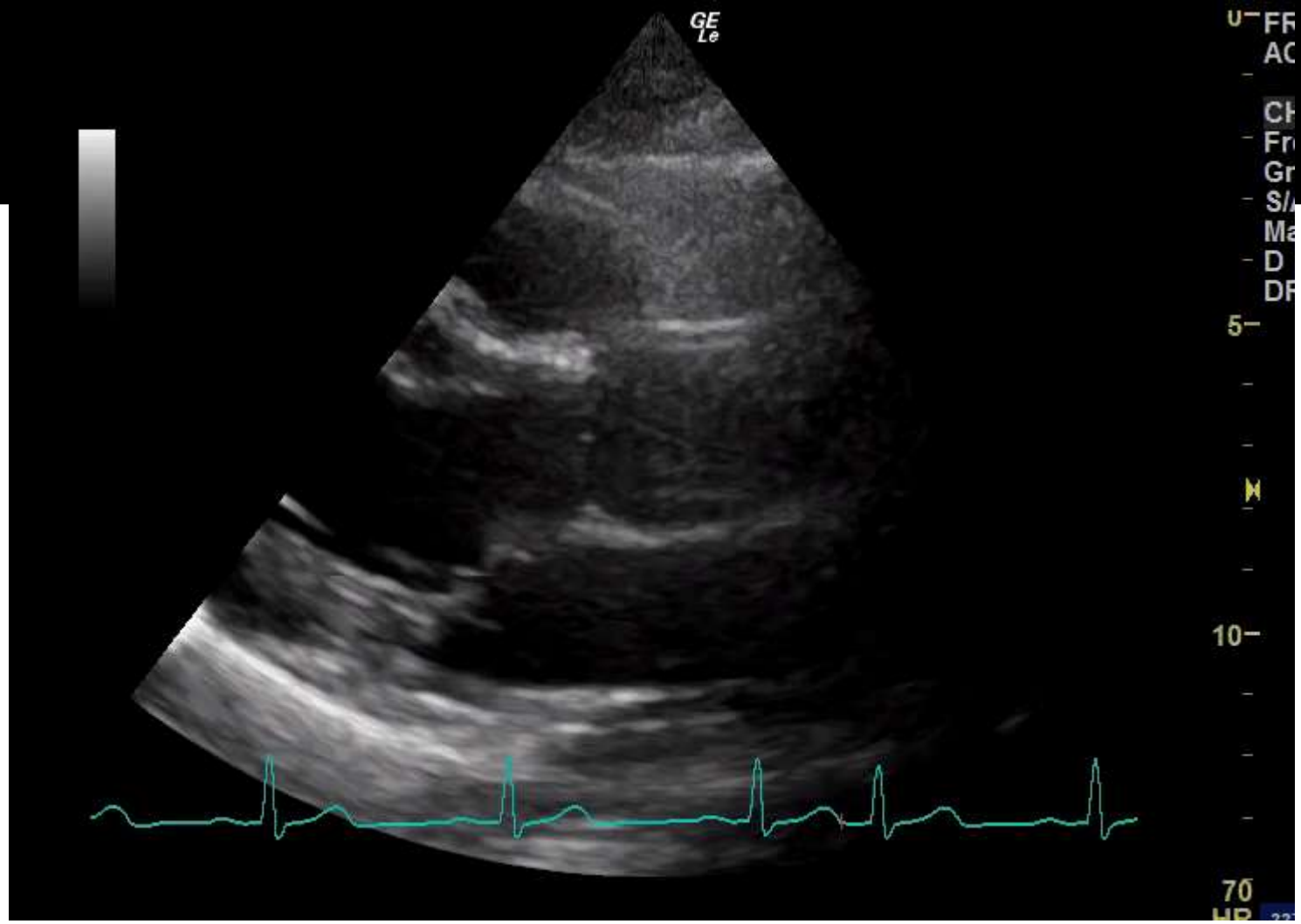
- Good Starting Point for Cardiac Exam
- Useful To Assess EF
- 1/3 1/3 1/3
- Effusion
- Pivot Point For Next Views

PSLA



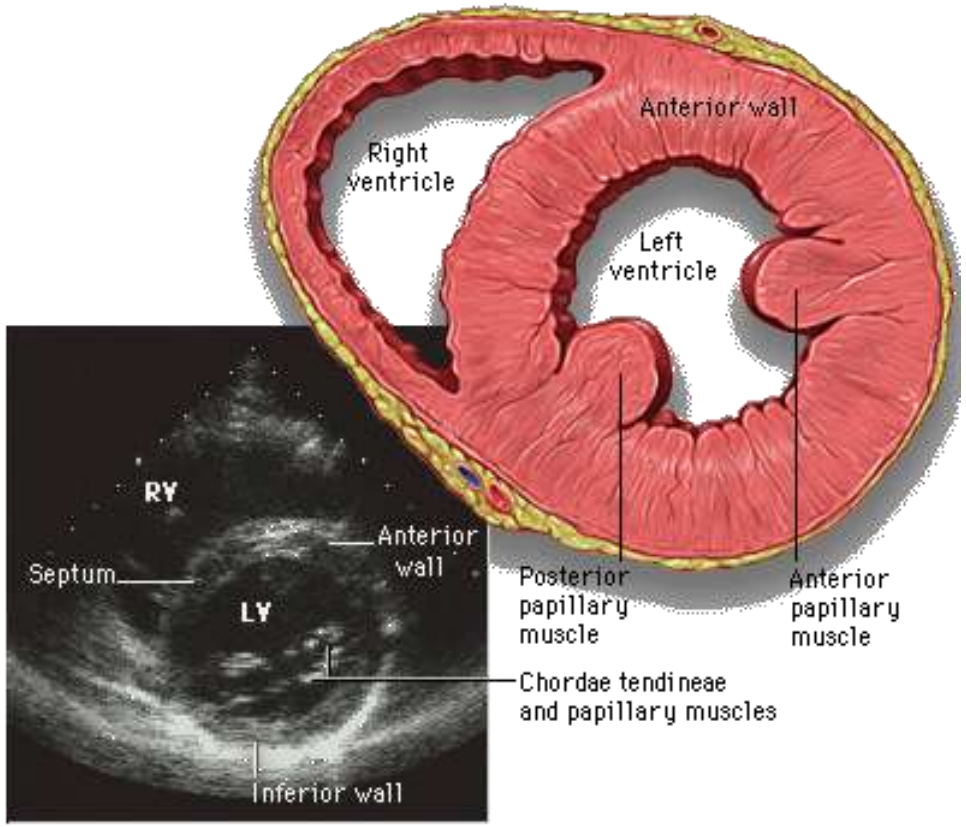


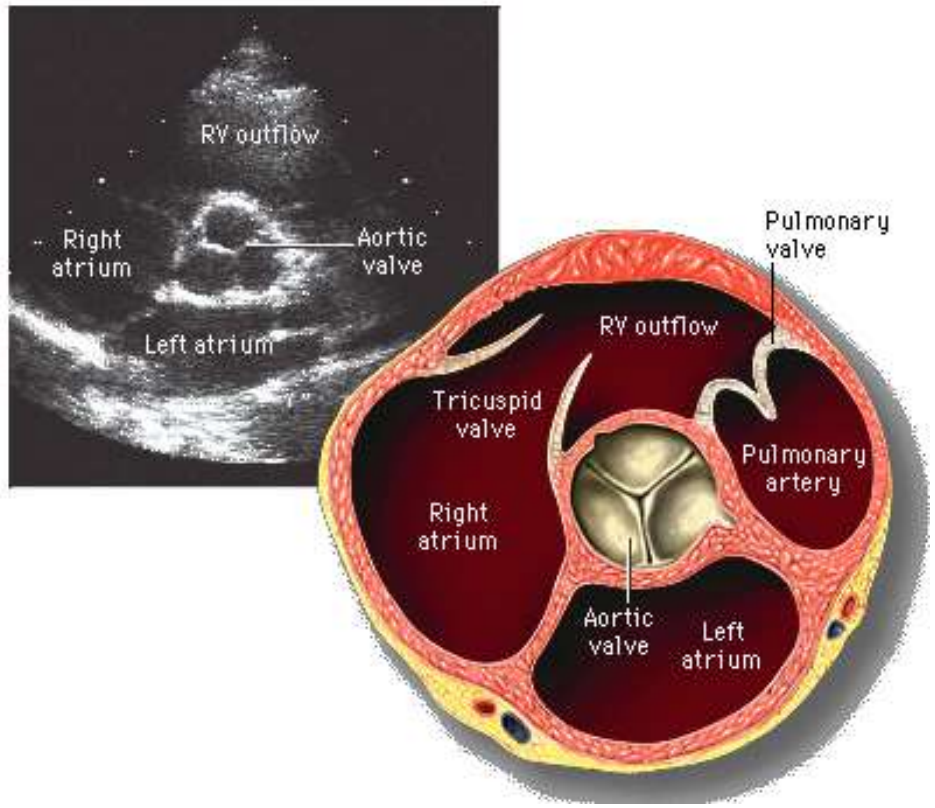
PSLA



ParaSternal Short Axis View

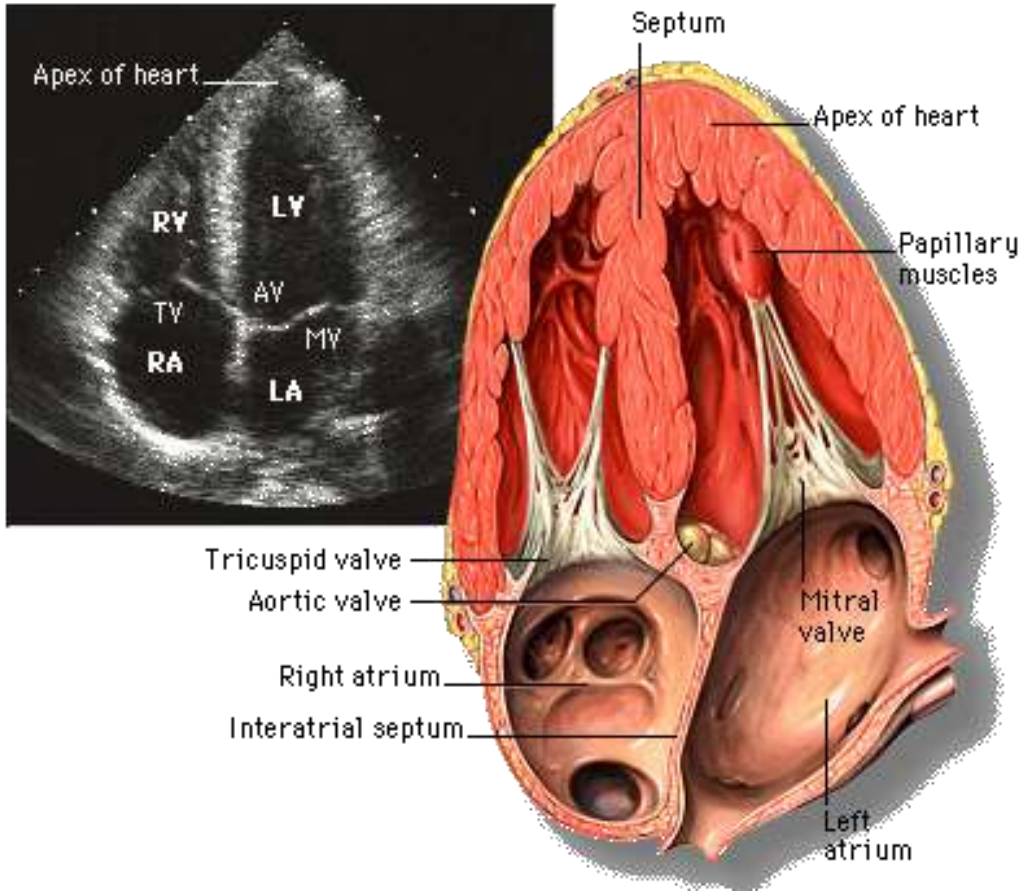
PSSA


Anterior wall
Right ventricle
Left ventricle
RV
Anterior wall
Septum
LV
Posterior papillary muscle
Anterior papillary muscle
Chordae tendineae and papillary muscles
Inferior wall


RV outflow
Right atrium
Aortic valve
Left atrium
Pulmonary valve
RV outflow
Tricuspid valve
Pulmonary artery
Right atrium
Aortic valve
Left atrium

Apical Four Chamber

A4C


Apex of heart
RV
LV
AV
TV
MV
RA
LA
Septum
Apex of heart
Papillary muscles
Tricuspid valve
Aortic valve
Mitral valve
Right atrium
Interatrial septum
Left atrium

A4C

- Good For Squeeze Assessment
- Ventricular Size Comparison 0.6/1
- Useful For Valve Assessment With Color Doppler
- Permits More Advanced Assessments

A4C

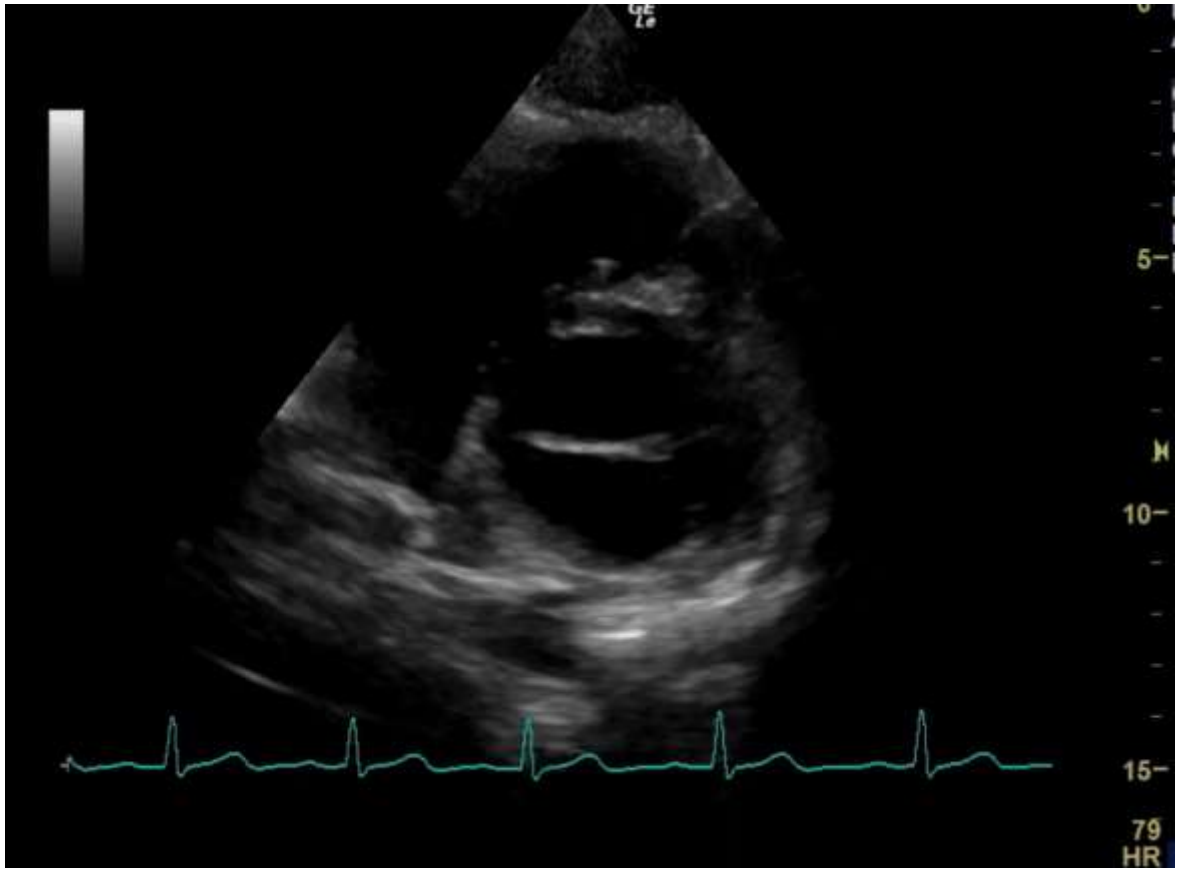
- Angle vs. Skin

A4C

- When Difficult to find, use "Fall Off the Shelf" technique

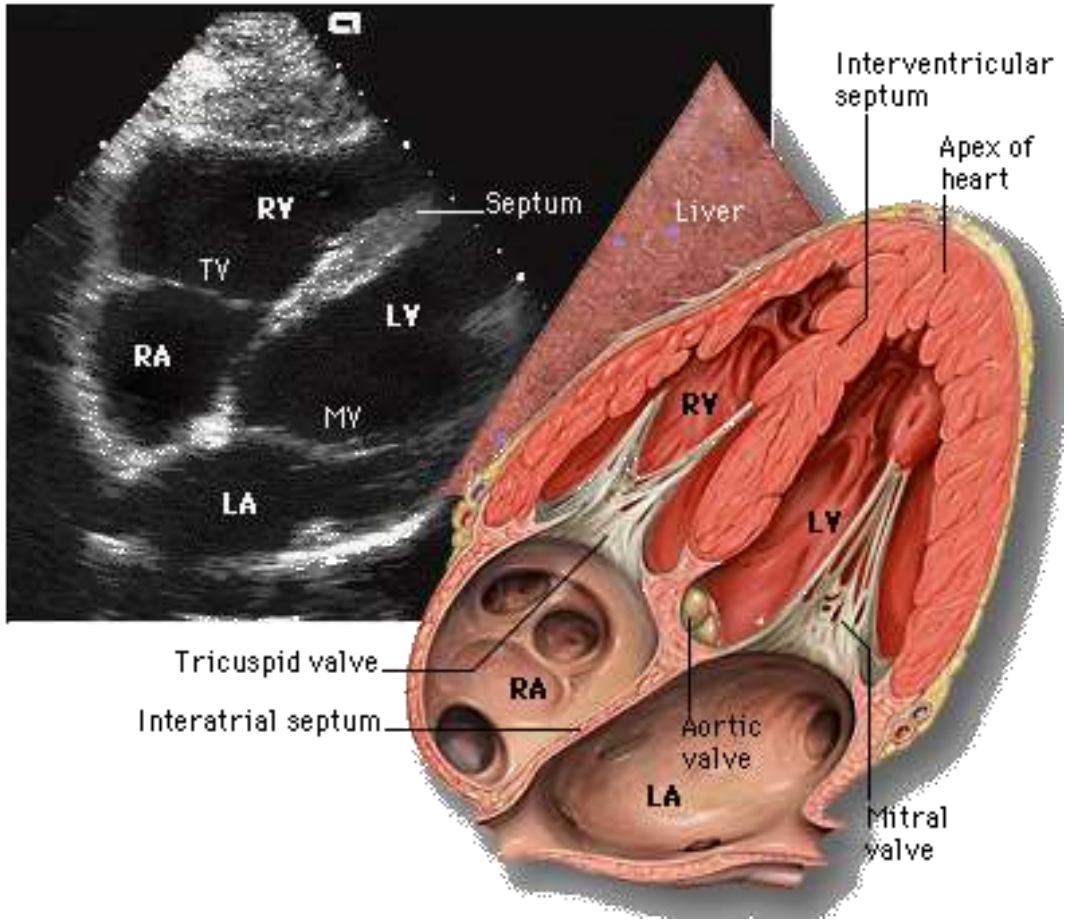
A4C

- When Difficult to find, use "Fall Off the Shelf" technique



SubXiphoid View

SX


RV
Septum
TV
LV
RA
MV
LA
Liver
Interventricular septum
Apex of heart
RV
LV
Tricuspid valve
RA
Interatrial septum
Aortic valve
LA
Mitral valve

SX

- Best View For Effusions
- May Be The Only Window In COPD
- Can View All Four Chambers
- Best View for ASD With Color Doppler
- Best Window In Cardiac Arrest
- Trouble? More Depth & Deep Breath

Case Presentation

Case Presentation

- 50 YO M with history of Hypertension and HFpEF treated with diuretics and B blocker Echo: EF=55%, LVH, E/e'=16
- Visit Today Home Care and assessment
- Pt more SOB and fatigue than usual. Hx of gradual onset
- VS- P:80 reg. BP:108/68 R:14 SpO_2: 98% T:98.1 LS:clear, no edema

DDX ?

- Fluid Over load
- AMI
- Pulmonary Edema
- Anemia
- Pulmonary Embolus
- Pneumonia/Infection
- Deconditioning

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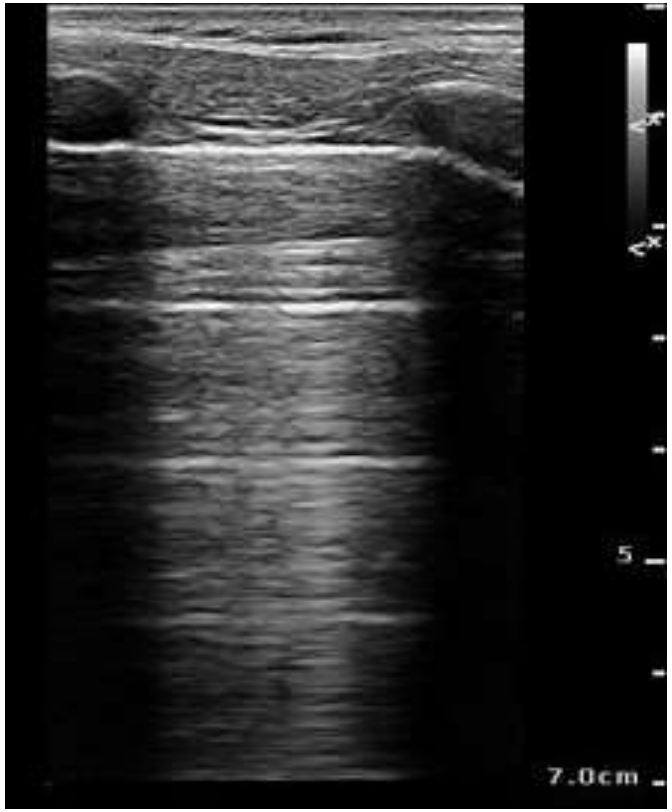
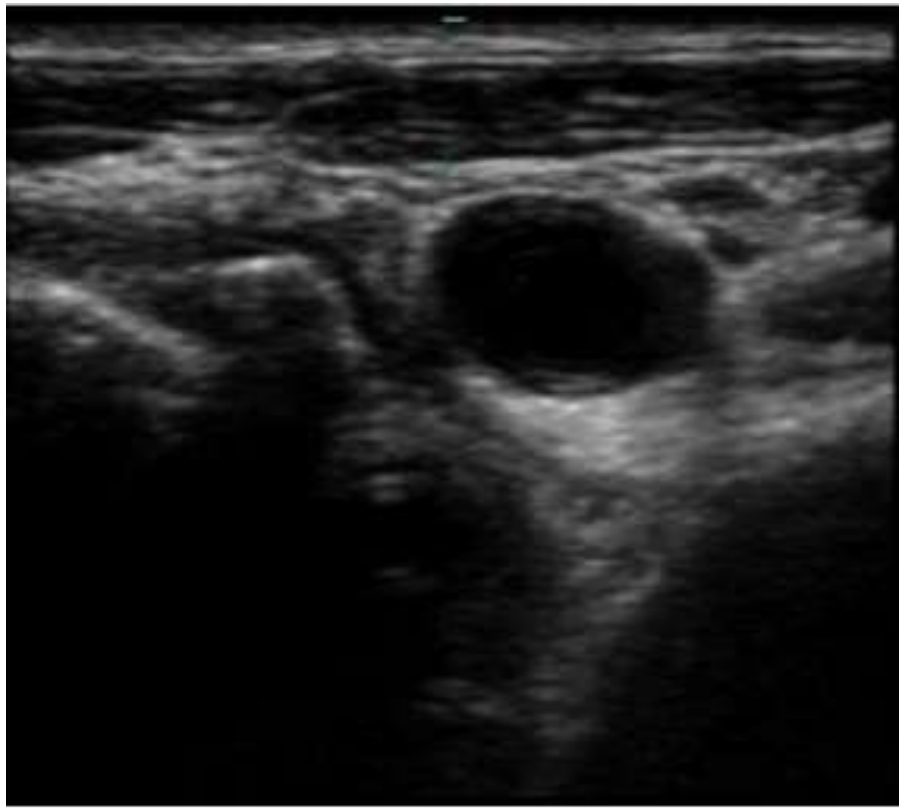
Case Presentation

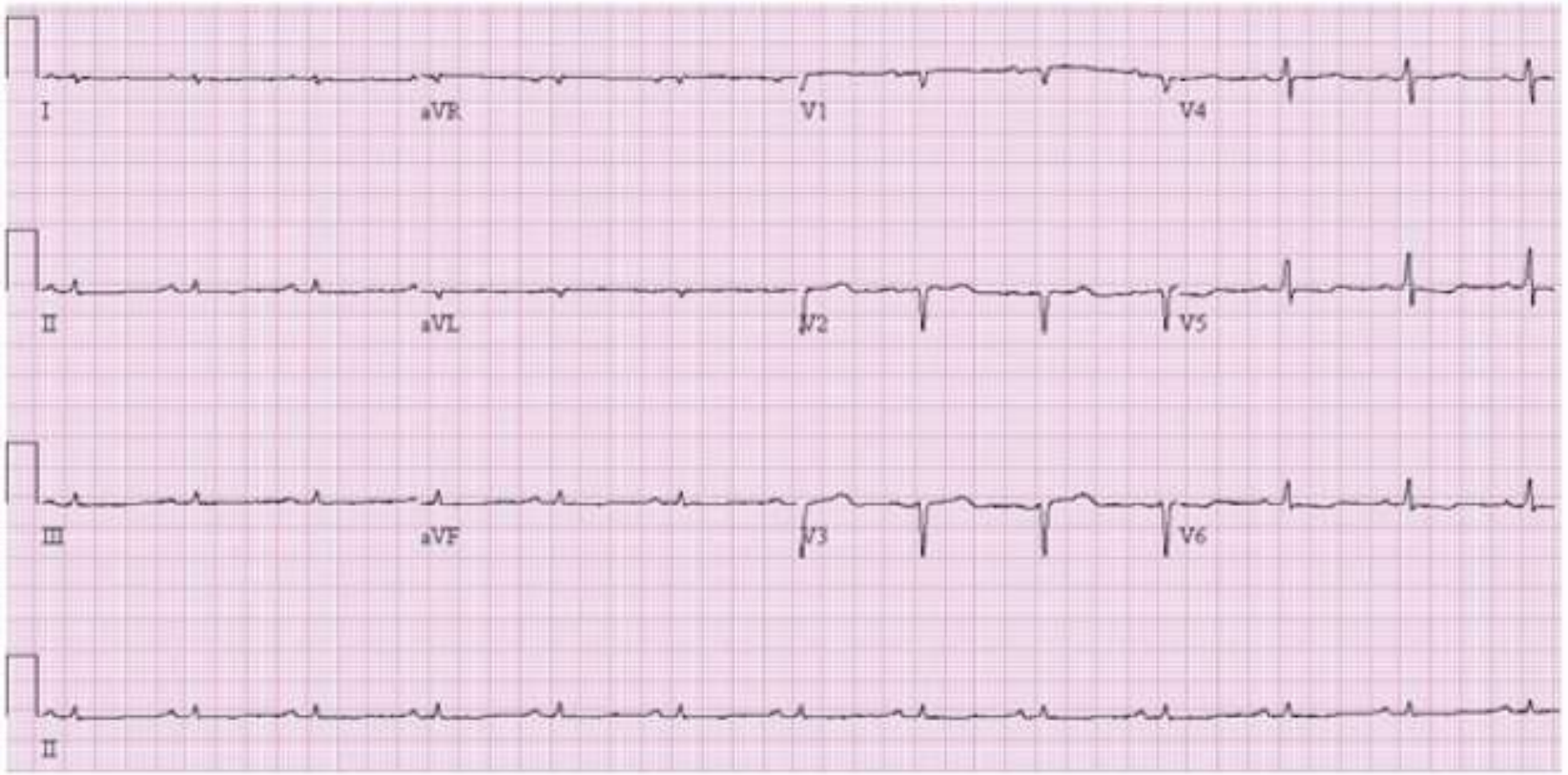
Posterior Lung base



Anterior Neck



Case Presentation Conclusion



ATTR-CM

VYNDAMAX® (tafamidis)

Cardiac POCUS Played an important role in the assessment and care of this patient.

Questions?

Thank You for all that you do!