



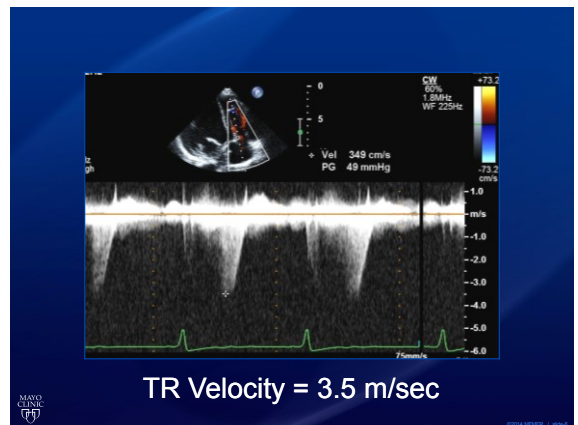
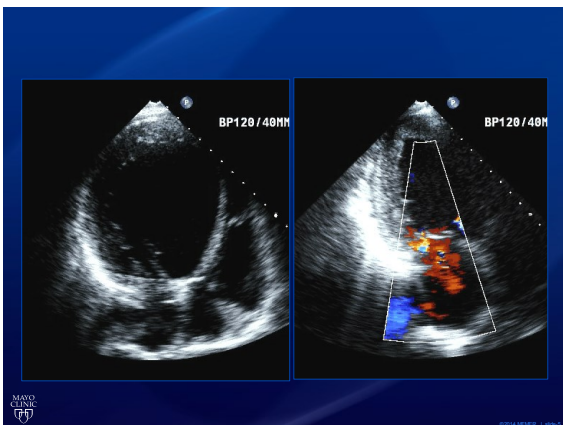
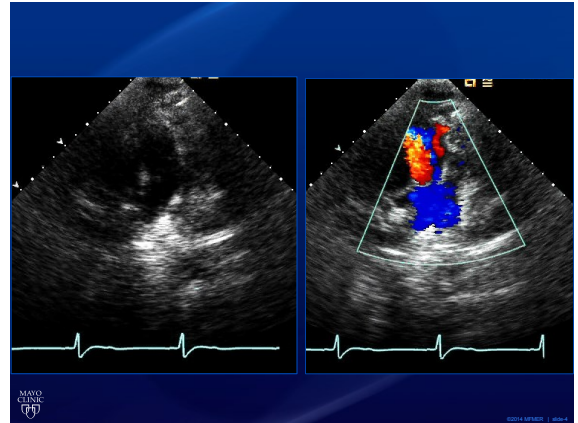
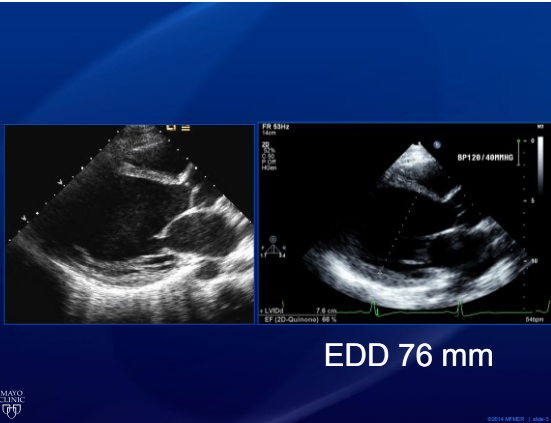
Reversible Heart Failure Cases

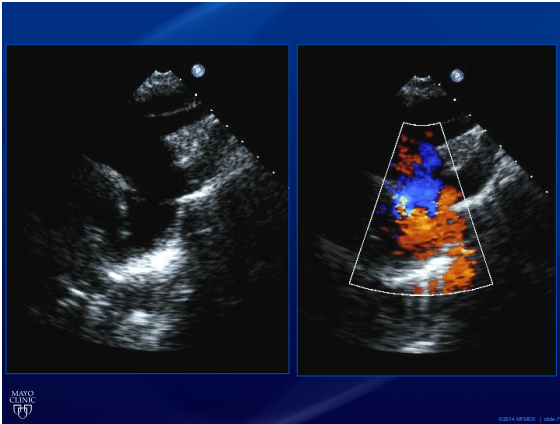
Heidi M. Connolly

Advanced Echocardiography
Dunblaine, Scotland
June 2, 2015

31-Year-Old Female

- Immigrant from North Africa
- No prior medical history
- Recent progressive dyspnea
- No meds





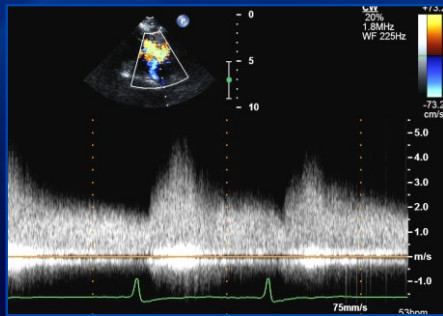
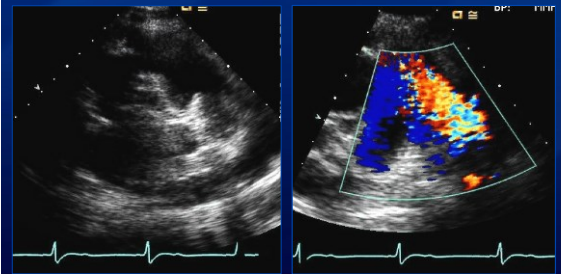
Echocardiographic diagnosis?

1. Pulmonary valve regurgitation
2. Pulmonary hypertension
3. Non-compaction syndrome
4. Other

What next?

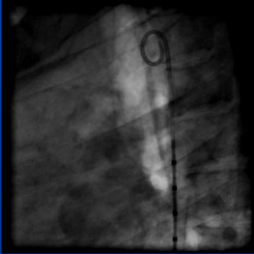
1. Medical therapy
2. CMR or CT
3. TEE
4. Additional TTE imaging
5. Cardiac catheterization

Additional Imaging



What now?

1. Catheter based intervention
2. Surgical intervention
3. Medical therapy
4. Further testing

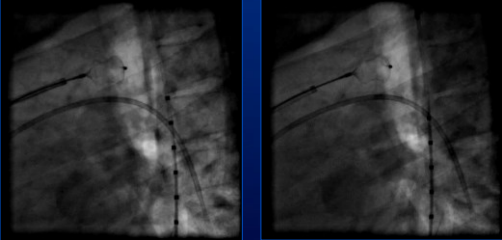


PA pressure 68/34 mmHg
Mean PA pressure 46 mmHg
Rpa = 5 units M2

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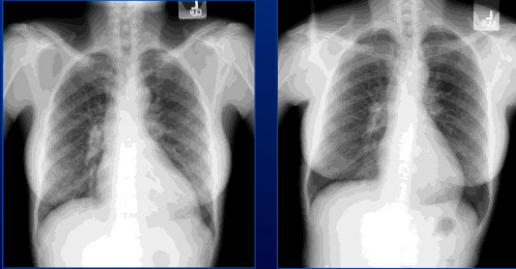
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14 mm Amplatzer Vascular Plug
Post PA pressure 42/17, mean 27 mmHg

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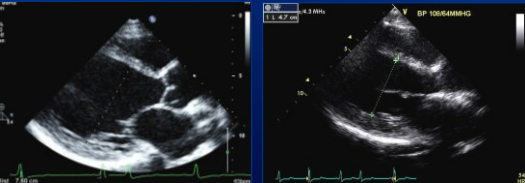
4 Month Follow-Up



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Pre PDA Closure
EDD = 76 mm

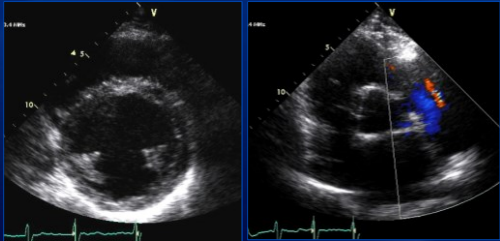
Post PDA Closure
EDD = 47 mm



Estimated RV systolic pressure 34 mmHg

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65-Year-Old Female Severe Dyspnea



What is the Diagnosis?

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What would you recommend?

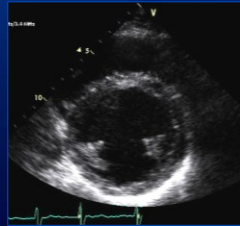


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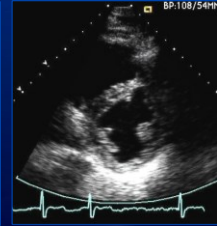
65-Year-Old Female with PDA PDA Device Closure

Pre-procedure

16 months post



EDD = 70 mm
EF 21%



EDD = 54 mm
EF 52%



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Patent Ductus Arteriosus

- Associated with maternal rubella
- F:M = 3:1
- Continuous “machinery” murmur, envelops S2
- Differential diagnosis
 - Pulmonary or CAA-V fistula
 - AP window
 - Ruptured sinus of Valsalva aneurysm



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Indications for PDA Intervention

Class I

- LV volume overload but PAP <2/3 systemic or PVR <2/3 of SVR
- Device closure method of choice where suitable
- PAH and PAP >2/3 systemic pressure or PVR >2/3 SVR but still net L→R shunt (Qp:Qs >1.5) or pulmonary vascular reactivity present

ESC GUCH Guidelines 2010



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Adult PDA

- Dyspnea, murmur, left heart enlargement
- Indications for PDA Closure
 - LA and/or LV enlargement, heart failure
 - PHT with net left-to-right shunting
 - Prior endarteritis
- Calcified PDA poses a surgical risk and catheter intervention should be the first option



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Questions & Discussion

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