# Strategies for Acute Heart Failure: Emerging Trends and Therapies

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#### Case presentation

- 27y old Saudi gentleman with end stage HF ( stage D)
- Dx : familial dilated CM
- FHx of premature cardiac death
- AICD implanted months ago for recurrent VT
- Hx of Recurrent admission with ADHF



#### Clinical assessment

#### **Present complaint**

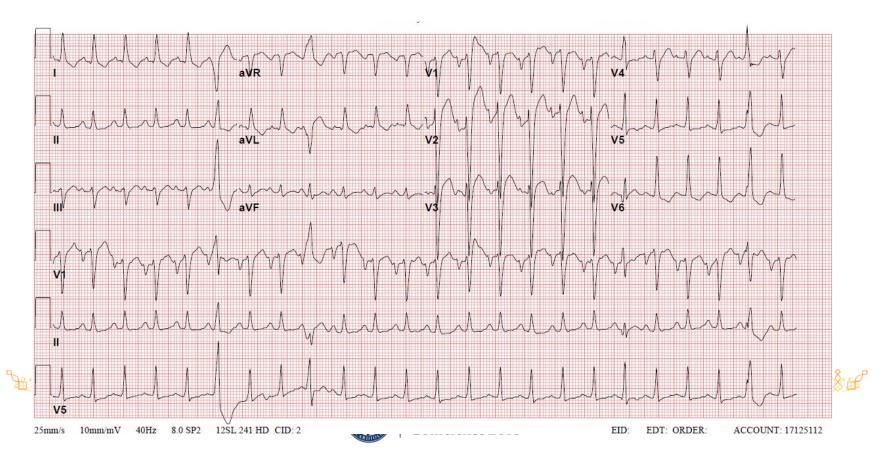
- SOB, NYHA III, IV
- PND
- Orthopnia

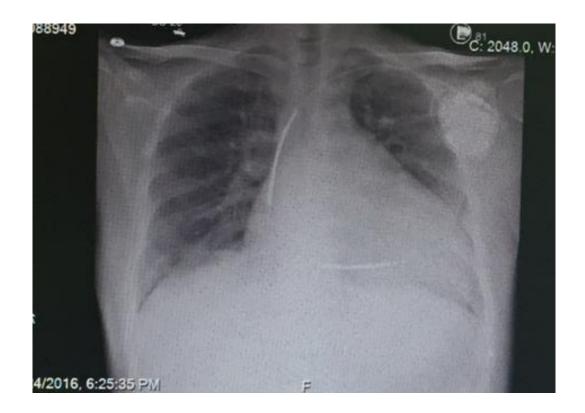
#### Physical assessment

- BP 105/55
- HR = 98 B/M regular
- CVS = S1+S2+S3+PSM, raised JVP
- Chest= bi-basal crepitation



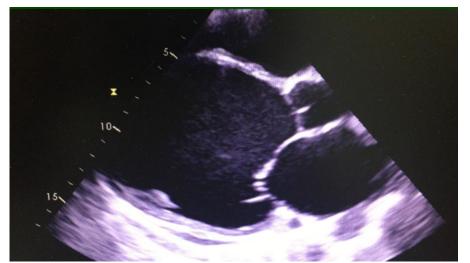
#### **ECG**

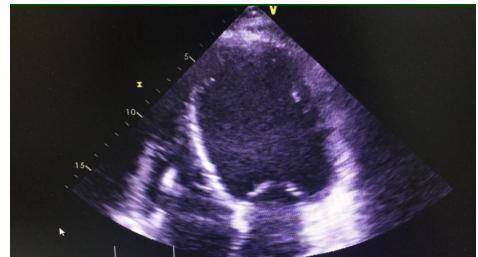






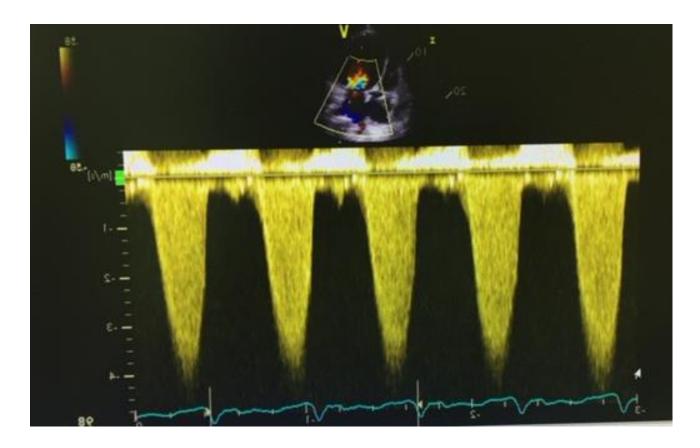
















#### **Initial Laboratory Results**

Na	113	
U	13	
Cr	76	
ProBNP	> 3000	
Hb	11.5	
K	3.9	





### Right Heart cath

Site	Sys.∖A wave mmHg	Dias\V wave mmHg	Mean mmHg
AO	108	83	89
LV	114	11	32
RA	14	9	10
RV	76	4	20
PA	73	45	56
PCW	34	45	38



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- IV furosemide infusion with low dose dopamine infusion
- IV nitroglycerin
- Thromboembolic prophylaxis
- Hypertonic saline



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- Heart transplant is contraindicated in our patient because of high PVR and TPG
- LVAD should be considered as destination therapy because of presence of hyponatremia
- Percutaneous mitral valve interventions is proven effective long term therapy for patients with advanced end stage HF

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### Subsequent Hospital Management





## **Hyponatremia Management**

- IV diuretics
- Fluid restriction
- IV vasodilator
- Hypertonic saline

