



# Mechanical support in Pediatric

# History

- ▶ Pt age 3+ yr
- ▶ 5d cough with sniff, no fever, parent give amoxicillin
- ▶ 4d dyspnea FC II
- ▶ 3d progressive dyspnea go to hospital
- ▶ BP 87/57mmHg HR 140min BT 36.7c RR 26tpm
- ▶ Crepitation both lungs , hepatomegaly 4cm below Right costal margin
- ▶ Give iv fluid 10ml/kg in 1hr then repeat BP 90/60mmHg HR 130bpm(weak)
- ▶ Give iv fluid 5ml/kg and start dobutamine 10mcg/kg/min with ceftriaxone, oseltamivir, Zithromax then refer to another hospital

# Progression

- ▶ BP 86/63mmHg HR 136bpm RR 33tpm
- ▶ Heart normal S1S2 no murmur, LV heaving with PMI at 6<sup>th</sup> ICS
- ▶ Crepitation both lungs
- ▶ Echo : marked LVH and LAE, mild RAE EF 22-27% global hypokinesia, small pericardial effusion
- ▶ CBC Hb 11 Hct 34 WBC 9800 PMN 71% L 25% plt 374000
- ▶ BUN 7 Cr 0.3 Na 142 K 2.61 Cl 104 HCO3 17.5
- ▶ AST 119 ALT 47 ALP 146 TP 5.69 Alb 3.35 TB 0.4 DB 0.2
- ▶ Lactate 1.9

# Management

- ▶ Suspect acute myocarditis
  - ▶ IVIG 2g/kg
  - ▶ Thiamine 25mg iv
  - ▶ Lasix 5mg iv
  - ▶ Milrinone 0.47 mcg/kg/min
  - ▶ Dobutamine 10 mcg/kg/min
  - ▶ Correct E'lyte
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- ▶ SBP 80-90 mmHg CVP 9-12 I/O 1016/1260 lactate 1.2-1.3



# Medications and clinical status

- ▶ Adrenaline 0.24mcg/kg/min
- ▶ Dobutamine 20mcg/kg/min
- ▶ Dopamine 10mcg/kg/min
- ▶ Milrinone 0.7mcg/kg/min
- ▶ Echo EF 20%
- ▶ Progressive Cr rising from 0.4 -> 1.4 with poor urine output
- ▶ AST/ALT rising to 7777/2378

