

CASE REPORT

DR.N.RAVI

EMERGENCY MEDICINE-CRITICAL CARE

POST GRADUATE 1ST YEAR

CHIEF COMPLAINT

22 Yr old female presented to Emergency medicine department on 9/10/17 at 6:00 pm with chief complaints:

1. shortness of breath, grade -4 since 3hrs.
2. chest pain, leftside nonradiating type since 3hrs.

VITALS on presentation :

BLOOD PRESSURE	180/130mmHg
HEART RATE	126BPM
RESPIRATORY RATE	36 CPM
TEMPERATURE	NORMAL
SPO2	40% ON RA

PRIMARY SURVEY

- **AIRWAY** : Minimal oral frothy secretions present.
- **BREATHING** : **TACHYPNEIC** (36/MIN) SPO2 : **40%** on RoomAir.
- **CIRCULATION** : **HYPERTENSION**(180/130mmHg).
CRT normal .
- **DISABILITY** : GCS –E4V5M6 (15/15) with Bilateral pupils normal size reacting to light.

CRITICAL ACTION

RESPIRATORY DISTRESS:

Head end elevation to 30 degrees

O₂ supplementation with variable performance device(face mask)@4 lit/min.



Non invasive ventilation using BiPAP with
IPAP-12 cm of H₂O

EPAP-6 cm of H₂O

HYPERTENSION: INJ.Nitroglycerine

0.25microgm/kg/min IV continuous infusion.

HISTORY

- 22 Yr old female brought with complaints of sudden onset of shortness of breath, grade-4, associated with chest pain, left side non radiating type since 3 hrs.
- History of productive cough, fever on and off since 1 week.
- No history of palpitations and syncope.
- No history of similar complaints in the past.
- PMHx : Nothing significant.
- PSHx : Nothing significant.
- Marital history: married 2yrs back
No children.

SECONDARY SURVEY

- GENERAL: Patient is obese and in severe respiratory distress.
- HEAD : Atraumatic .
- EYES :bilateral pupils normal size reacting to light,no pallor.
- NECK : Full range of motion , no JV distension,short neck present.
- ORAL : Normal dentition, minimal oral frothy secretions present, no swellings.
- CHEST & LUNGS : No deformity ,bilateral fine end inspiratory crepitations present (Rt>Lt).
- HEART : S1S2 present, No murmurs.

SECONDARY SURVEY

- ABDOMEN : Soft , no distension , no guarding/rigidity, abdominal striae present.
- UROGENITAL : normal
- EXTREMITIES : normal, no pedal edema.
- BACK : hump over posterior part of chest.
- NEURO : GCS 15/15.
- SKIN : Abdominal striae present.
- NO Lymphadenopathy.

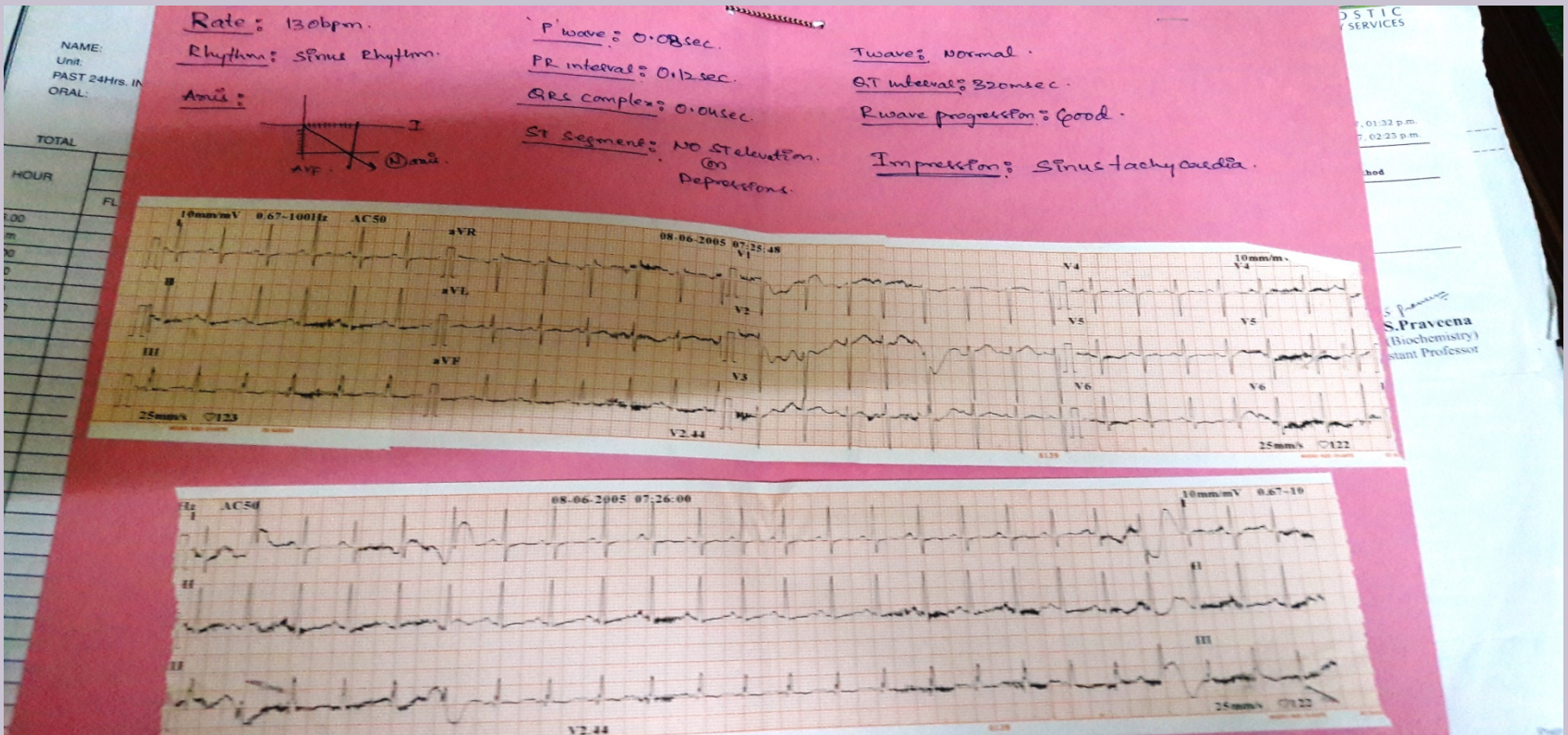
INVESTIGATIONS

ARTERIAL BLOOD GAS ANALYSIS

PH	7.43
PCO2	36.5
PO2	40.5
HCO3	24.5
FIO2	0.2
SPO2	60%

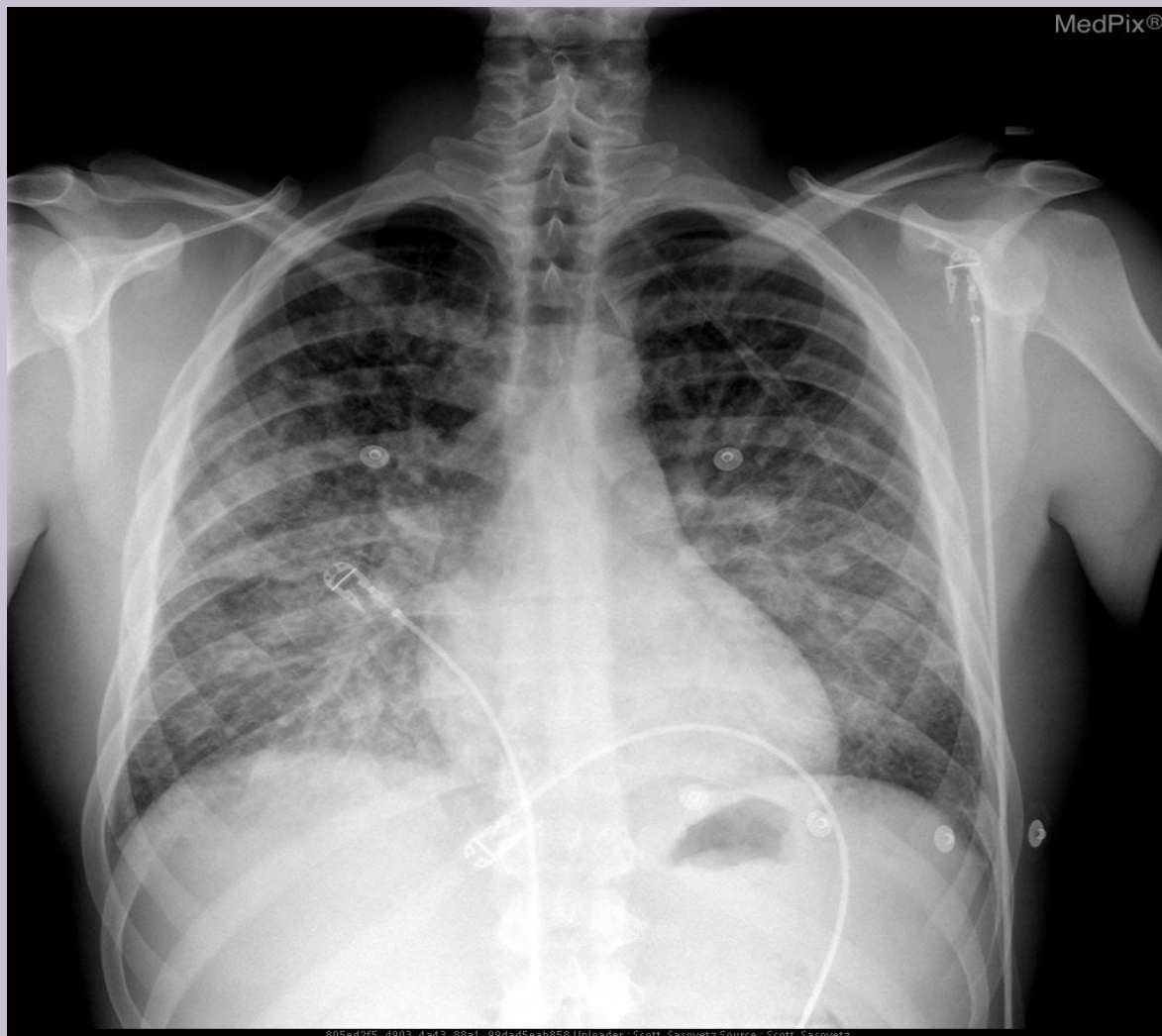
HYPOXEMIA PRESENT

ECG



SINUS TACHYCARDIA

CHEST X RAY



INVESTIGATIONS

**BED SIDE: 2D ECHO : SEVERE LV DYSFUNCTION
(EF-36%) With mild LVH**

CK	60.9 IU /L (NORMAL 0-200 IU/L)
CK MB	33.4 IU/L (0-24 U/L)
TROPONIN I	NEGATIVE

PROVISIONAL DIAGNOSIS ON ADMISSION

- HYPERTENSIVE EMERGENCY WITH ACUTE CARDIOGENIC PULMONARY EDEMA .
- ACUTE PULMONARY THROMBOEMBOLISM

INVESTIGATIONS

RENAL FUNCTION TESTS

BLOOD UREA	18.5mg/dl
SERUM CREATININE	0.71mg/dl
SODIUM	145mmol/l
POTASSIUM	2.5mmol/l
CHLORIDE	106mmol/l

LIVER FUNCTION TESTS

TOTAL BILIRUBIN	0.99 mg/dl
DIRECT BILIRUBIN	0.45 mg/dl
SGOT	33 IU/L
SGPT	15 IU/L
ALK PHOSPHATE	131 IU/L
TOTAL PROTEINS	5.7 gm/dl

Complete blood picture

Wbc count	23,000/cumm
Haemoglobin	15.3 gm%
Platelet count	4.35 lakhs/cumm

DIAGNOSIS ON ADMISSION :

HYPERTENSIVE EMERGENCY WITH ACUTE
CARDIOGENIC PULMONARY EDEMA

TREATMENT ON ADMISSION

PROBLEM BASED APPROACH :

- HYPERTENSION WITH ACUTE CARDIOGENIC PULMONARY EDEMA.
- HYPOKALEMIA

TREATMENT ON ADMISSION

- **HYPERTENSION WITH ACUTE CARDIOGENIC PULMONARY EDEMA :**

Head end elevation upto 30 degrees.

Strict IV Fluid restriction.

O2 supplementation via VPD @ 6 lit/min.

BiPAP with IPAP-12cm H2O

EPAP-6 cm H2O

INJ Furosemide 40mg IV/Stat.

INJ Nitroglycerine 0.25micro gm/kg/min IV Infusion.

HYPOKALEMIA:

INJ KCL 8 meq/hr(40 meq in 500 ml NS) IV over 5 hrs.

After 6 hrs of admission

- Patient is stabilised with decreased respiratory distress (RR-16/min,spo2 90%with room air)and minimal crepts on left side.
- Blood pressure:140/90 mm of Hg
- Pulse rate:86 bpm
- Hypokalemia corrected(s.potassium:3.4 mmol/l).
- Same treatment was continued for pulmonary edema and hypertension(non invasive ventilation , INJ Furosemide 40 mg IV TID, Tapering INJ Nitroglycerine 0.25micro gm/kg/min iv continuous infusion).

THANK YOU

