



a case report: pulmonary thromboembolism with orbital cellulitis

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ABSTRACT- SPE is a rare syndrome, although a frequent clinical presentation of several disorders, many times misdiagnosed in medical practice. It was described 30 years ago; Recent reports indicate that the epidemiology of patients with septic pulmonary embolism has changed over the past 30 years. We report a case of septic pulmonary embolism associated with Orbital cellulitis, the chief complaints were swelling around left eye and neck on left side. A 2D-echo revealed multiple pulmonary infiltrates.

I. INTRODUCTION-

A condition in which one or more arteries in the lungs become blocked by a blood clot. Most times, a pulmonary embolism is caused by blood clots that travel from the legs, or rarely, other parts of the body (deep vein thrombosis or DVT). Symptoms include shortness of breath, chest pain and cough.

Prompt treatment to break up the clot greatly reduces the risk of death. This can be done with Anticoagulants and drugs or procedures. Compression stockings and physical activity can help prevent clots from forming in the first place.

Pulmonary embolism remains a disease which needs high clinical suspicion to prevent mortality and morbidity. More so in young healthy individuals, suspicion is very low as compared to old age individuals with multiple co-morbid conditions. Pulmonary embolism carries high mortality if not suspected and treatment initiated as early as possible.

II. CASE REPORT-

A 30 year young man presented in the ER with the chief complaints of swelling in the right eye since 2 days which was sudden in onset and progressive in nature. Patient complained of painful eye movement, sudden vision loss with painful eye movement. The patient also complained chest pain for 2 days which was also sudden in onset and progressive in nature, non-radiating, continuous and confined superiorly to epigastric area. Pain was aggravated on strenuous activity and there was no relieving factor. Pain was associated

with of shortness of breath, on grading dyspnea it came out to be NYHA grade 3. Breathlessness had no diurnal variation. Breathlessness was relieved on lying down. Patient also complained of multiple episodes of vomiting since last 2 days, the vomiting was non bilious, non projectile and no traces of blood was noticed. No history of headache or syncope.

The patient is driver by occupation and is doing so since last 15 years. Patient had no such complaints in the past. Patient is a non alcoholic and non smoker, with no history of hypertension, asthma or diabetes mellitus or any chronic illness in the past.

On examination patient vision was compromised unilaterally in the affected eye, and on local examination the temperature of the affected eye was risen and was erythematous and edematous. On chest examination B/L breath sounds were decreased with scattered wheeze on chest examination.



INITIAL MANAGEMENT- Initially the DD in the ER was made of mosquito bite and orbital



cellulitis and hence we started the patient of anti-allergic and anti-biotics and inhalational steroids and salbutamol nebulization for the breathlessness and chest pain, Acyclovir was started after Suspicion of Herpetic Keratitis, initially patients B.P was low (60/40mmhg) so he was started on Infusion NORADRENALIN (2amp+40cc N.S) at a rate of 4ml/HR after few hours patients B.P was improved.

Vitals of the patient on the admission was-

HR- 96/min, BP-40/60 mm of hg,
SPO2- 86%, RR-18/min

INVESTIGATION-

a) AT THE TIME OF ADMISSION: -

Hemoglobin (Hb) – 13 g%

Total leukocyte count (TLC) – 18800/cumm

Differential Leukocyte Count (DLC) – P: 93%,
L: 05%, E: 1%

Biochemistry - NORMAL

Chest X-ray (CXR) PA view – Increased Broncho vascular Markings

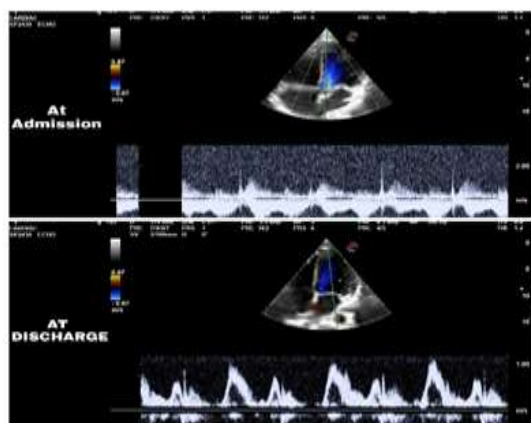
ECG – Absent ‘P’ Wave, Tachycardia

Cardiac markers – TROP I- NEGATIVE , CPK-MB- 61.3.

COAGULATION PROFILE- Pt-17.2 (N-9.5-13.5), INR – 1.49 (N- <1.5), aPTT-74.4 (C-29.0)

HEMATOLOGY- ESR – 48, WBC-18,800, APTT- 74.4

COLOUR DOPPLER: (LOWER LIMB)- Normal Doppler study, **(CAROTIDS)-** B/L Carotid vessels show



Normal blood flow, Grade 3 Subcutaneous edema with multiple Loco regional and cervical Lymph nodes likely reactive.

MRI CONTRAST OF BRAIN AND ORBIT- Heterogeneously enhancing Subcutaneous Edema noted involving Left Para orbital, pre septal, supratemporal, infratemporal, cheek and extending inferiorly up to Neck, Inflammatory?

D- DIMER- 6960 ngFEU/ml , **COVID 19 –** NEGATIVE

2 D ECHO- Mild global LV Hypokinesia, Mild LV systolic dysfunction (LVEF: - 40-45%), LV (58mm), RA, RV Dilated, Mild MR, Severe TR (RVSP 12+RAP mmhg), IVC Dilated (27mm).

b) AT THE TIME OF DISCHARGE:

2D-ECHO : LVEF – 60%, Mild TR, No RWMA, RA, RV Not dilated.

-All the tests performed were with in normal limits

FINAL MANAGEMENT AFTER THE CONFIRMATION OF DX-

- Patient was Started on LMWH 04, tab. Ecosprin 75mg, tab. Warfarin, tab. Clindamycin, tab. Enzuflam, tab. Acyclovir, inj. Dexona.
- **AIRWAY MANAGEMENT:**
- patient was dyspneic at the time of admission maintaining a saturation of 86% was immediately taken on Bipap, within next few hours patient condition improved and was maintaining a saturation of 96%.
- After diagnosing and managing the case patient's saturation at the time of discharge was 99%.
- Patient was discharged in good condition maintaining all vitals and was asked for follow-up after 10 days

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