

# A TEAM BASED APPROACH TO COMPLEX MEDICAL CASE

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# COPD complications requires a multidisciplinary approach

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Respiratory infections

Heart failure

Atrial fibrillation

Polycythemia

Osteoporosis

Depression/Anxiety

Poor Mobility

Lung CA (increased risk)

- Profile of Patient: 84 years old male
- **Background History:**
  - COPD, ex smoker
  - HTN, high Cholesterol
  - Epilepsy
  - OSA
  - High BMI
  - Previous traumatic left ribs fracture

- Progressive shortness of breath, poor exercise tolerance, cough with expectoration, malaise, wheeziness, mild confusion.
- Examination: Bilateral bronchospasm, Normal SpO<sub>2</sub>, mild bilateral oedema
- Bloods: Mild elevated inflammatory markers and high proBNP
- Normal CT brain



Diagnosis: Exacerbation of COPD, mild congestive cardiac failure, delirium

# Unexpected Developments

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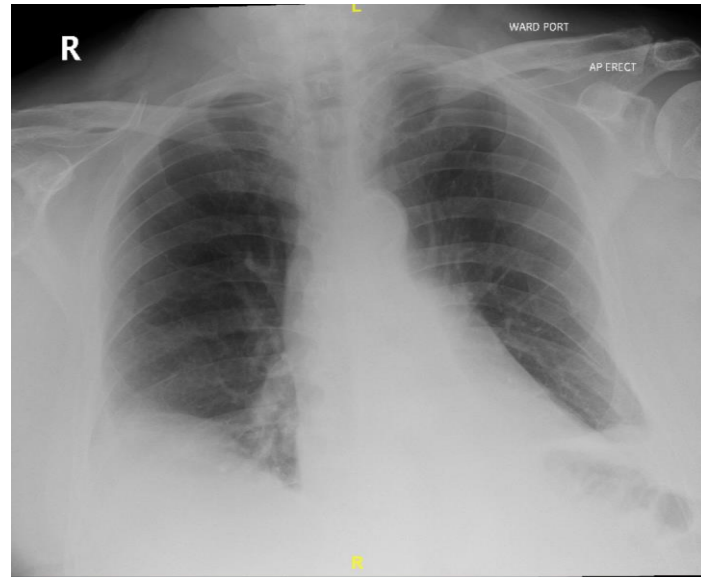
2 days after: No improvement despite treatment

Acute respiratory distress

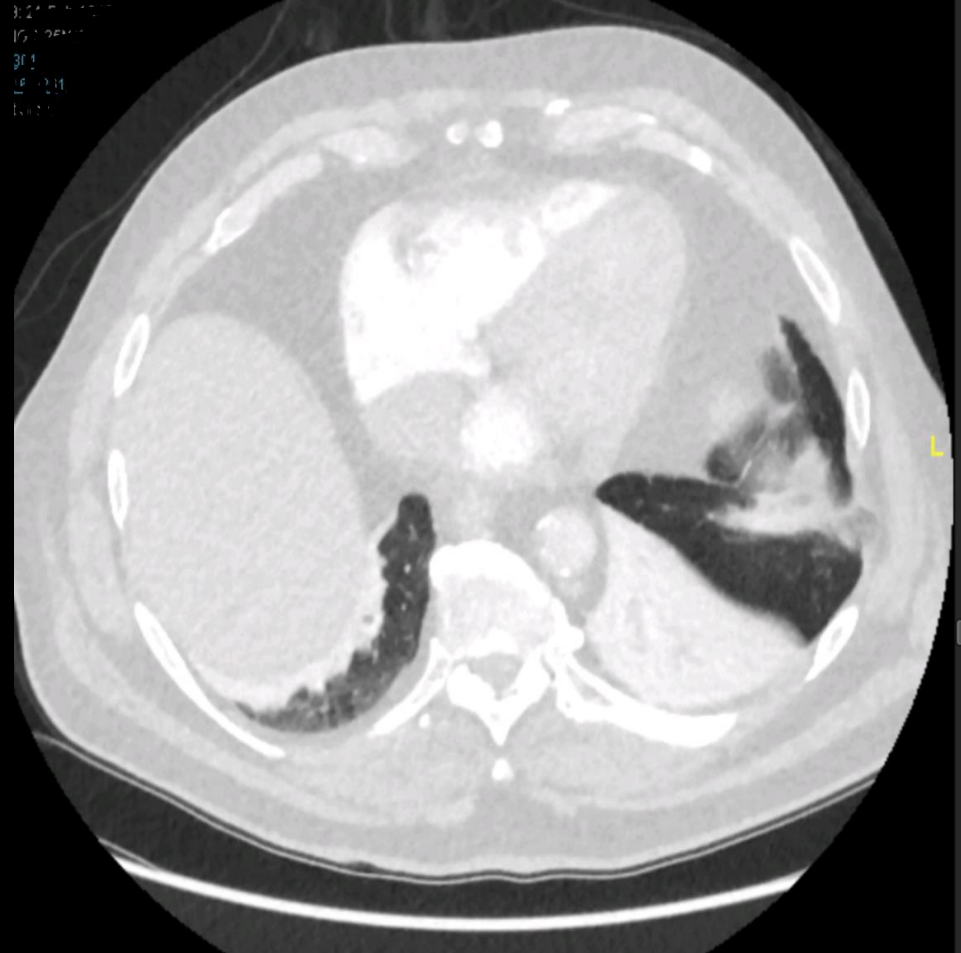
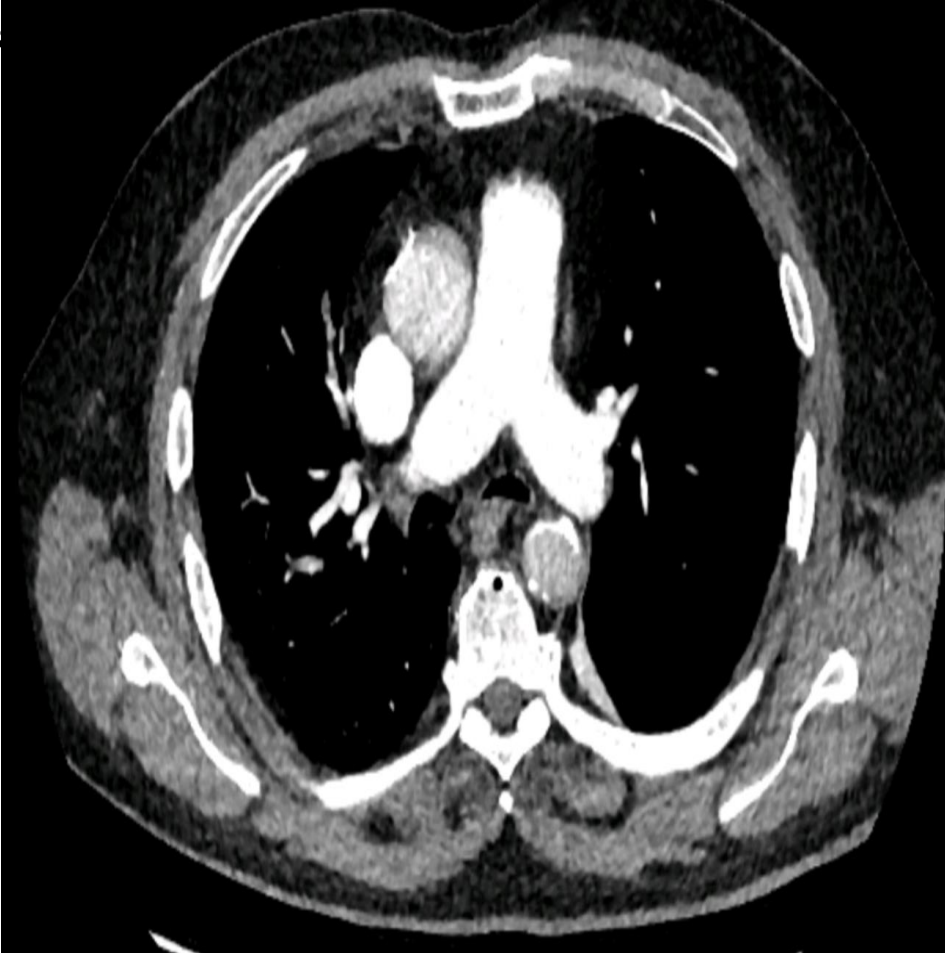
Respiratory Failure

Seizure activity

Acute Kidney Injury



What possible causes of no improvement?

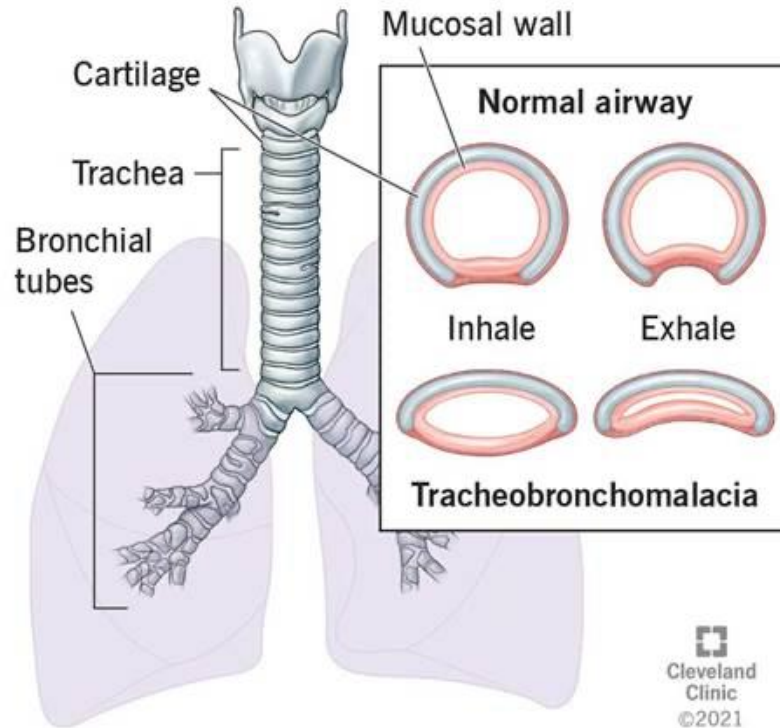


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ECG: non ST elevation changes and high troponin  
Normal MRI brain

# Complications:

Severe hypoxemia  
Type 1 respiratory failure  
Right Pulmonary embolism  
Left lung collapse  
Tracheomalacia  
ACS  
Heart failure  
Acute kidney injury



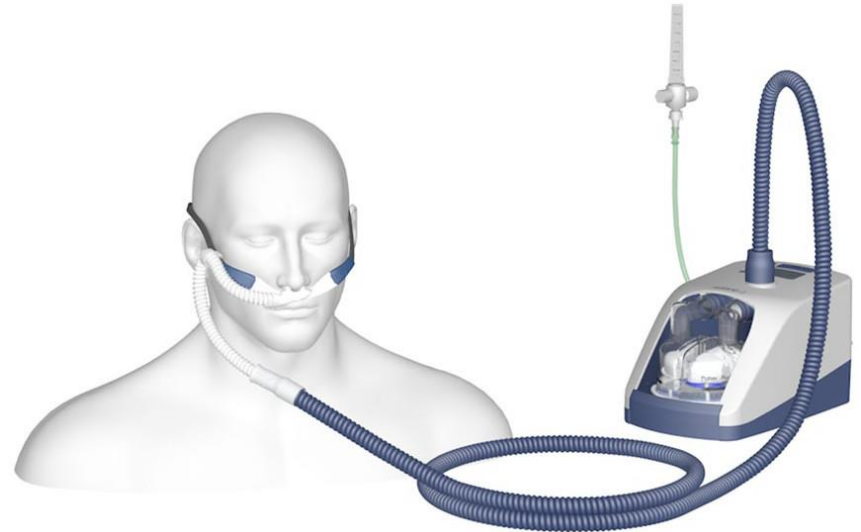
# Treatment and intervention

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High flow oxygen, antibiotics, bronchodilators, steroids, anticoagulation, strict monitoring in an intermediate care unit

Patient required input from Respiratory, Cardiology, Neurology, Nephrology, Urology

Respiratory Physiotherapy



## Case required a Multidisciplinary intervention for complete recovery

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Respiratory nurse

Occupational therapy

Medical social work

Dietitian

Extensive physiotherapy input, mobility etc

**Outcome:** Patient discharged directly home,  
Admitted electively for coronary angiogram: PCI x2 stents LAD

No further admissions



Case 2.

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# A Team Based Approach to Complex Medical Presentations. Catching Zebras while Herding Horses.

Prof Seamus Linnane

# Routine Presentation

## Presentation

- 78 years lady
- History
  - Nasal polyps
  - Asthma
  - Osteoporosis
  - Cholesterol
- 4 weeks
  - Fatigue
  - Fever
  - Weight Loss

## Observations

- Lassitude
- Confusion
- Ataxia
- Sinus rhythm
- Systolic murmur
- Fever

## Tests

- Urine dip +
- WCC 23
- CXR
  - Left base shadow
- CT Brain
  - Chronic ischaemia
  - Sinus congestion
- CT Body
  - Pneumonitis

## Impressions

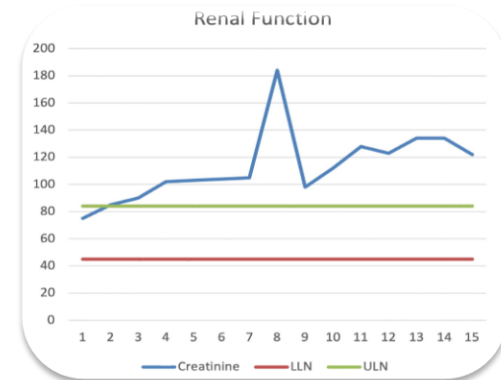
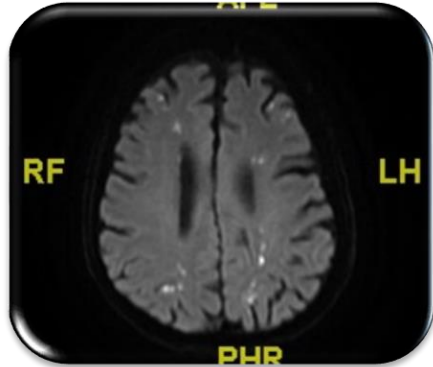
- Frail elderly
- Delirium
- Infection
  - UTI
  - Chest Infection

# Unexpected Developments



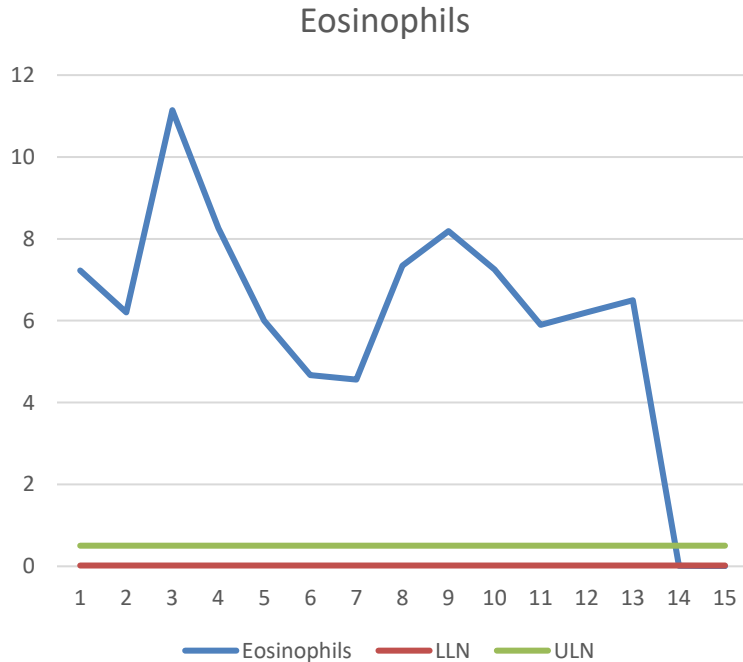
Unresolving Fever

Showers of Cerebral Infarcts



Acute Kidney Injury

# Enter the Zebras



## Supplementary Data

- Troponin 72
- NT-BNP 7768
- IgE 235
- RF 17, ANA 0.3
- ANCA MPO 134 (0-3.4)

## Conclusions

- Eosinophilic Myocarditis
- Intracardiac Thrombosis
- Central Cerebral Emboli
- Acute Nephritis
- Chronic Asthma with Polyposis
- Eosinophilic granulomatosis with polyangiitis (EGPA)

## Churg-Strauss Syndrome

# Conclusions

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**Medicine remains  
a science for those  
with an artistic  
leanings**

**A treatment  
requires a  
diagnosis**

**If the right  
treatment is not  
working the  
diagnosis is wrong**

**The sole purpose  
of a test is to  
confirm the  
diagnosis**

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# Thank you