

# COVID-19 Pneumonia Case Presentation



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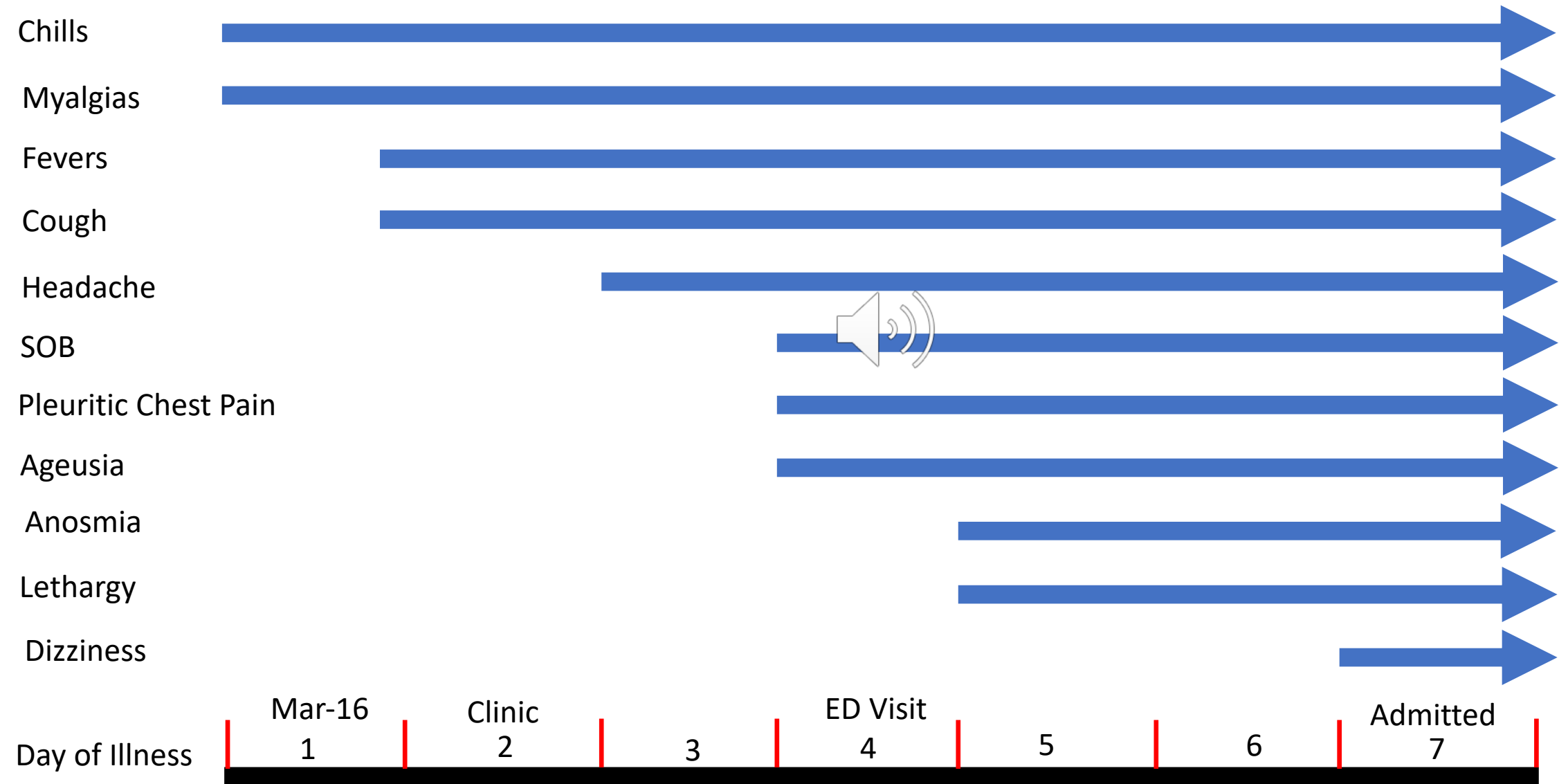
04-06-2020

# UAMS/VA COVID-19 Case #3 (of 18 to date)

- 54yo M with HTN, HLD, obesity, OSA and known COVID-19 infection presenting with worsening respiratory symptoms x7d



# Symptoms



# History

## Past Medical History:

- HTN
- HLD
- Obesity
- OSA
- PTSD
- Hearing Loss
- Osteoarthritis
- Migraines
- Surgeries: Meniscus and Elbow surgery

## Medications:

- HCTZ 25mg/Lisinopril 20 mg 1 tab daily
- Simvastatin 40 mg, 1 tab qhs
- Nortriptyline 50 mg 1 cap qhs




## Social History:

- Rare etoh
- No tobacco, vaping, illicit drugs
- Married with 3 adult children; lives at home with wife and one of the children
- Hobbies- yardwork, lawn care, active with several Veteran's organizations
- Most recent travel outside of Arkansas was March 1-2 to a casino in Oklahoma
- Works at a local college where other individuals have tested positive for COVID-19 infection



# Physical Exam:

- T: 100.3 HR 83 BP 136/80 RR: 40 O2: 78% on room air (99% on 15L NRB)
- GEN: Obese, AAM, in distress
- HEENT: Mild anterior cervical adenopathy ttp, no OP exudates, PERRLA
- CV: tachycardic, no murmur
- Lungs: bilat bronchial breath sounds,  tachypneic, faint wheezes
- Abd: Obese, NTND
- MSK: Moving all extremities
- EXT: No edema
- SKIN: No rash
- NEURO: AAOx3, CN2-12 intact, no focal deficits

# Initial Labs:

- CBC:

- WBC 3.9K
  - Absolute Lymphocyte: 400 (nl 1100-3500)
- HCT 39%
- PLTS: 115K

- BMP:

- Na: 130
- K: 3.2
- Cl: 114
- CO2: 24
- BUN: 22
- SCr: 1.3

- LFTs:


- AST: 97
- ALT: 78
- Tbili: 1.1
- LDH: 260



- Other:

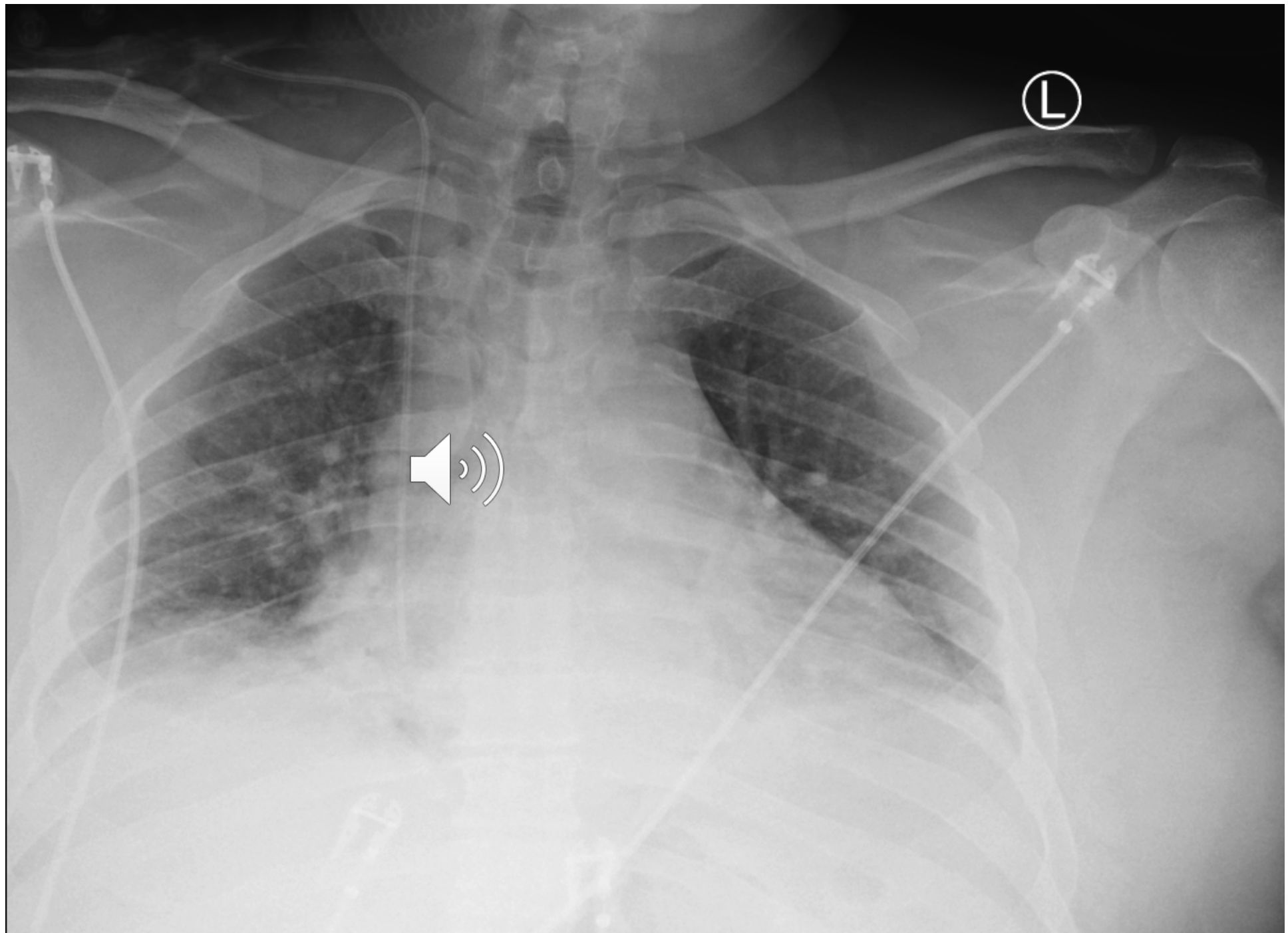
- Ferritin: 1857
- ESR: 24
- CRP: 136

# Microbiology:

- 03/19 (3d PTA) SARS-CoV-2 PCR: NP Swab +
- 03/22 BCx: Collected
- 03/22 SCx: Collected
- 03/22 MRSA Nares PCR: Collected 
- 03/22 urine legionella ag: Collected
- 03/22 urine pneumococcal ag: Collected

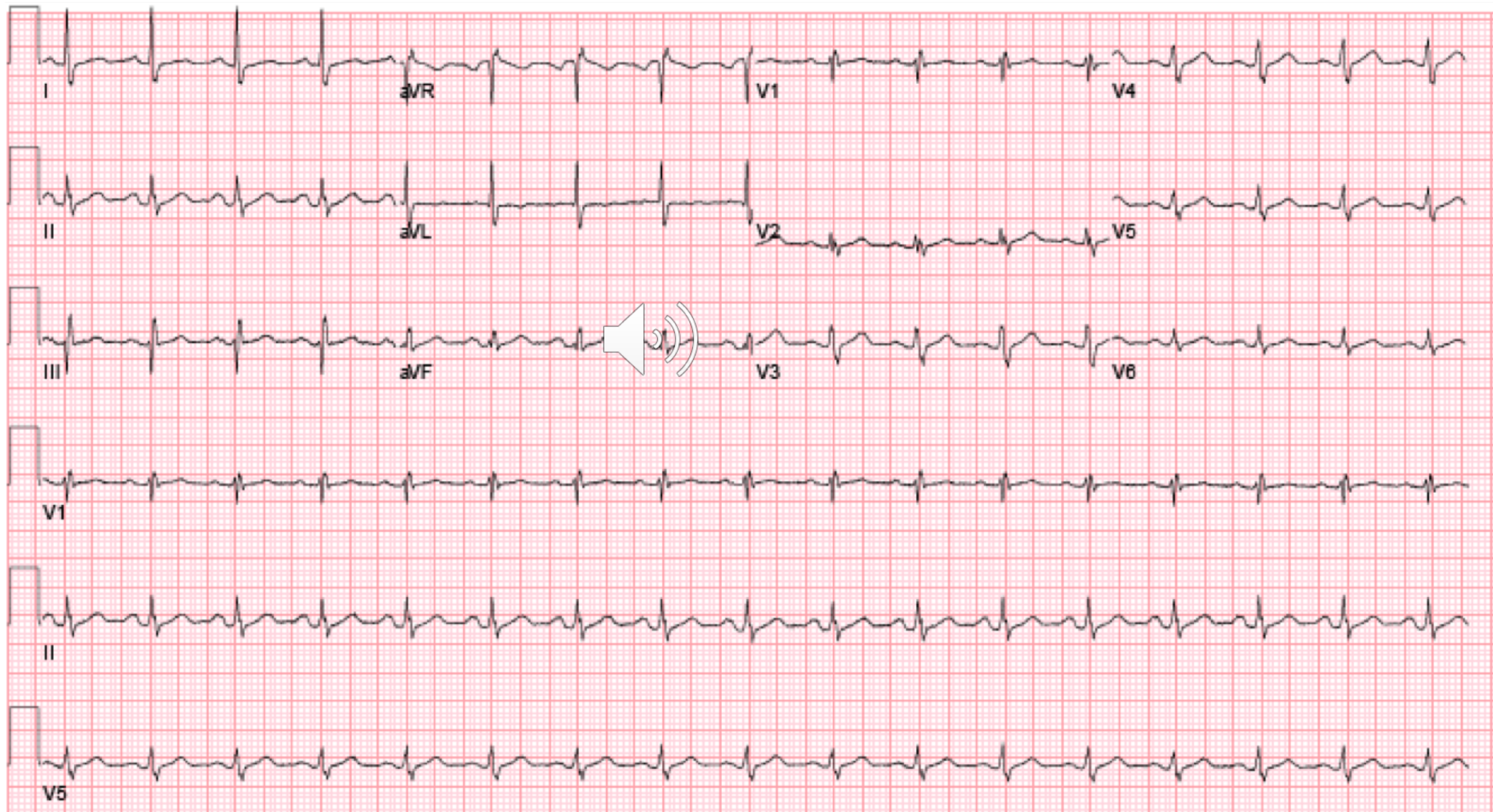
# Admission Chest XRay

1. Cardiomegaly
2. Hypoinflation
3. Basilar lung opacities with volume loss probable patchy air space disease



# Admission EKG

Sinus Tach  
HR 101 bpm  
QTc 438 ms



# Assessment and Plan:

## Severe COVID-19 Pneumonia:

- Admit on day 7 of illness
- Monitor in MICU with consideration of early intubation pending course
- Initiate Antibiotics for possible concomitant bacterial pneumonia
  - Vancomycin, Cefepime, Azithromycin
- Initiate 5d Hydroxychloroquine course for possible anti-viral and anti-inflammatory effect



# Hospital Course

- SCx, Legionella ag, Pneumococcal ag all unrevealing for co-infection
- Vancomycin discontinued on HD#2 (MRSA Nares negative)
- Cefepime switched to ceftriaxone for more appropriate CAP coverage

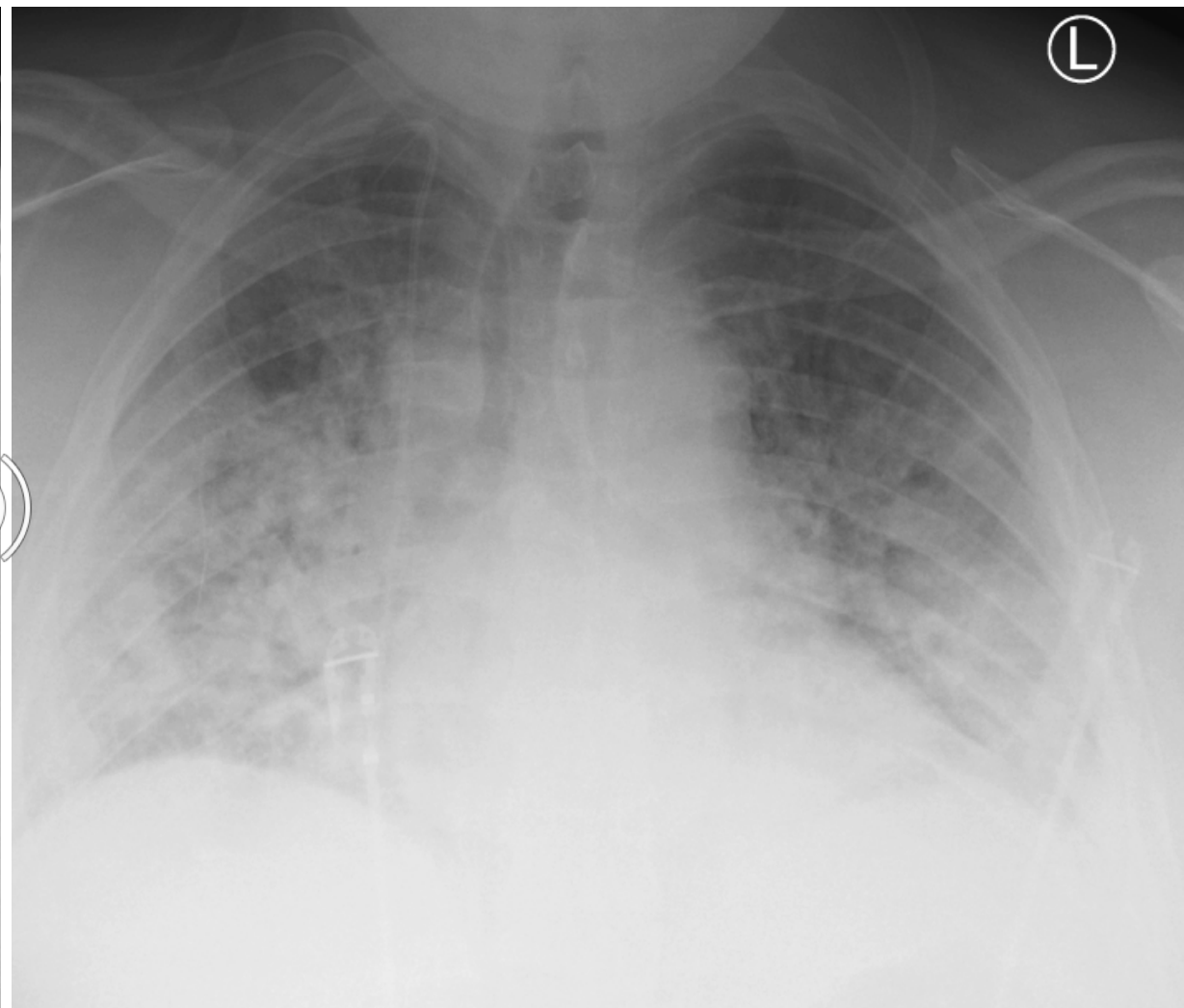




Admission Chest Xray (Day 7 of illness)



HD# 5 Chest Xray (Day 11 of illness)





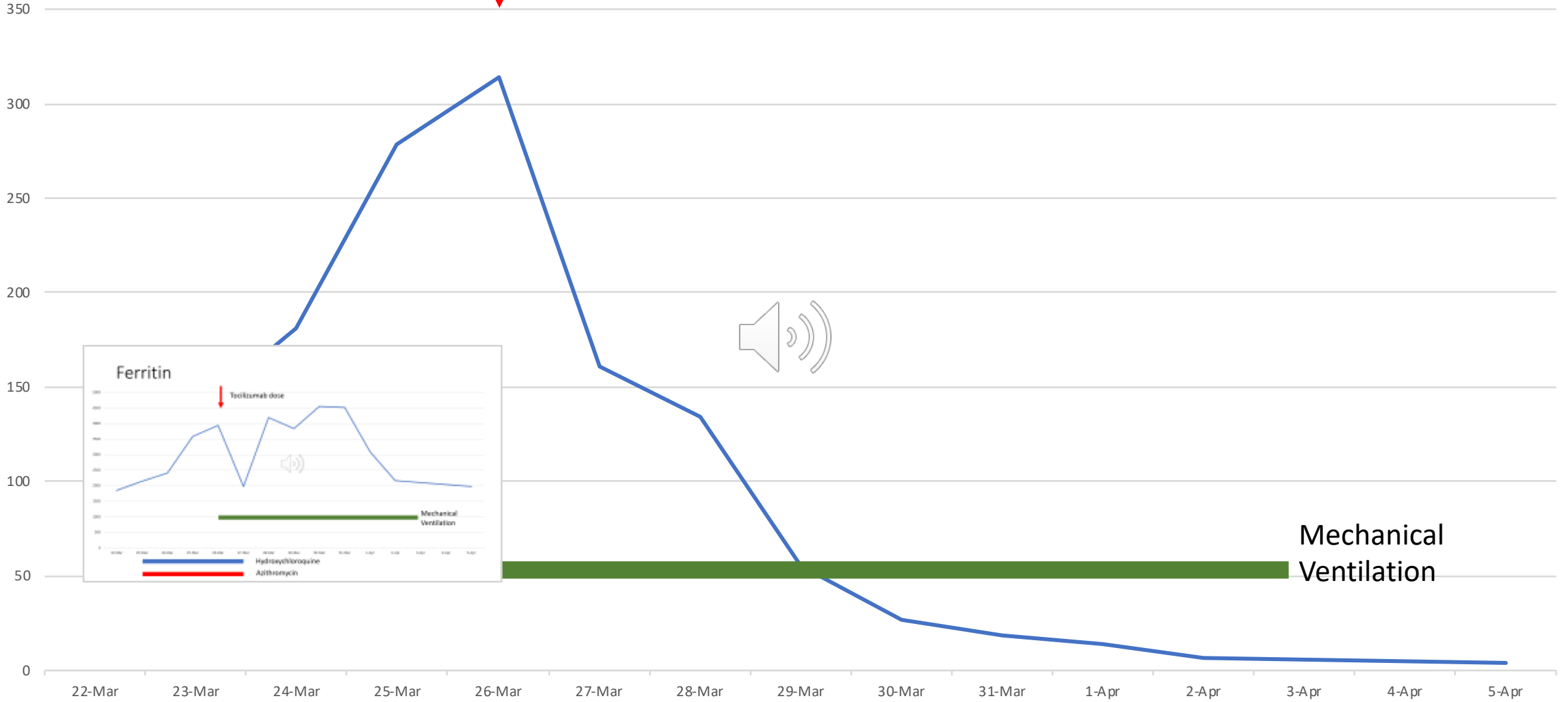
# Hospital Course Continued

- Increasing O2 requirement with progressive imaging findings
- Intubated on HD#4 (day 11 of illness)
- Tocilizumab administered HD#4 (day 11 of illness)



# CRP

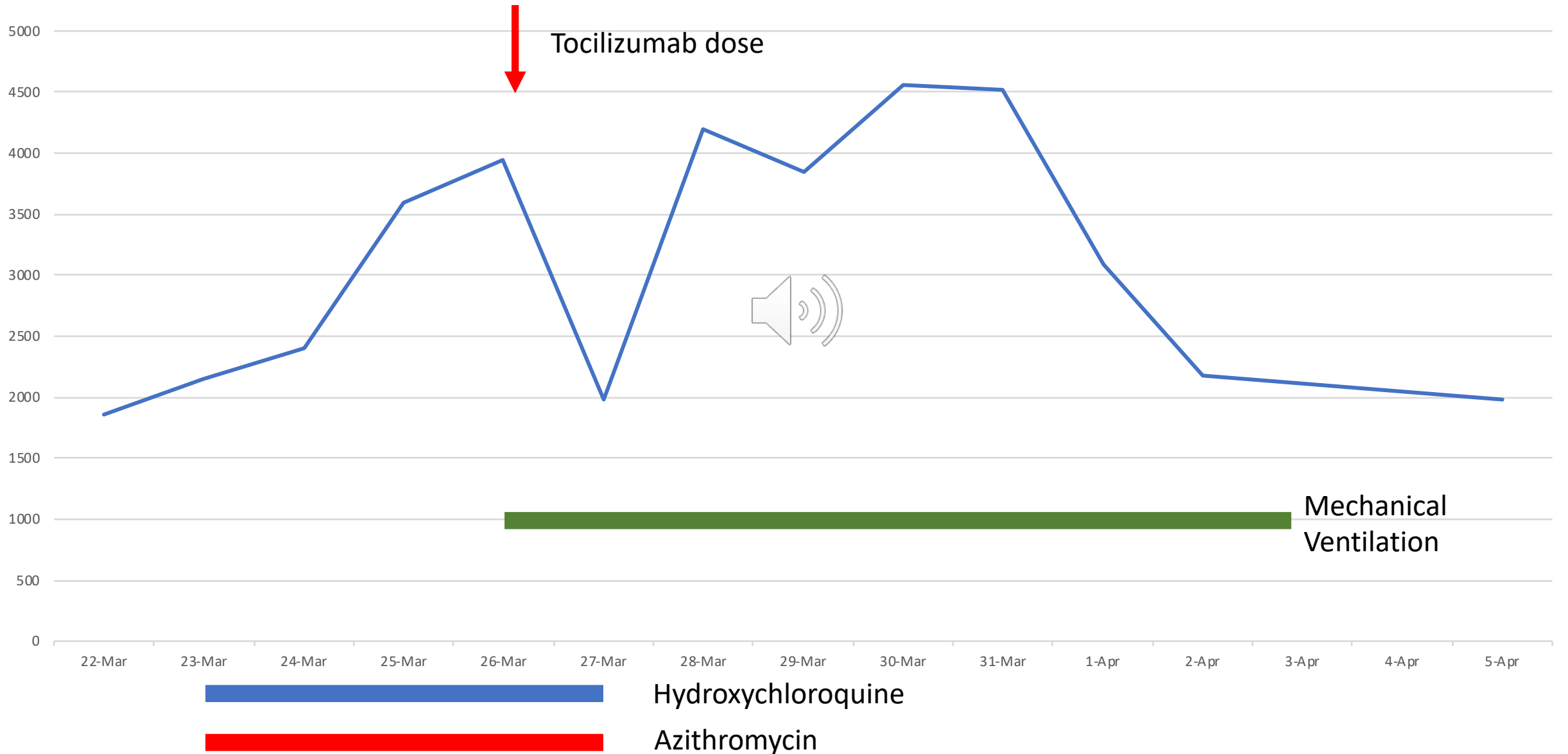
Tocilizumab dose



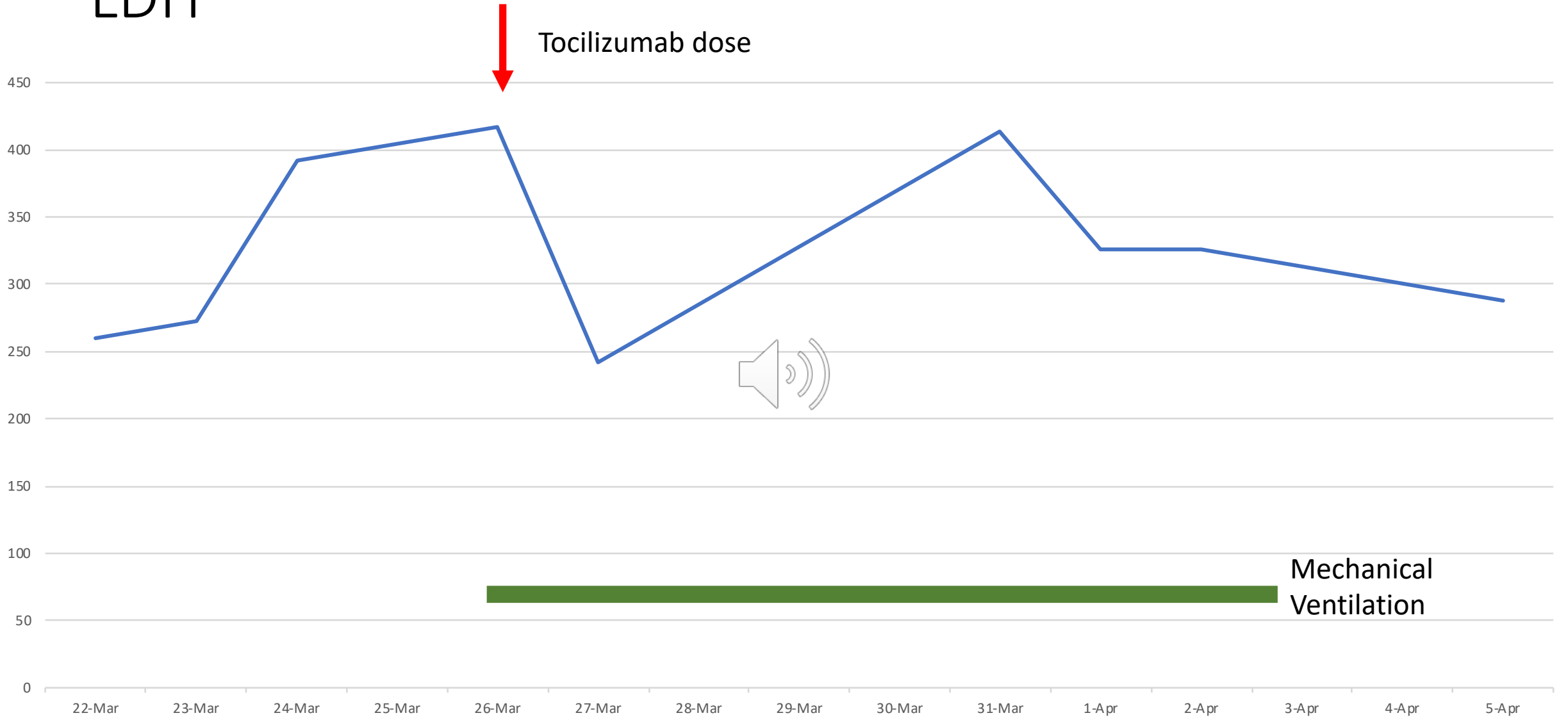
Hydroxychloroquine  
Azithromycin

Mechanical Ventilation

# Ferritin



# LDH

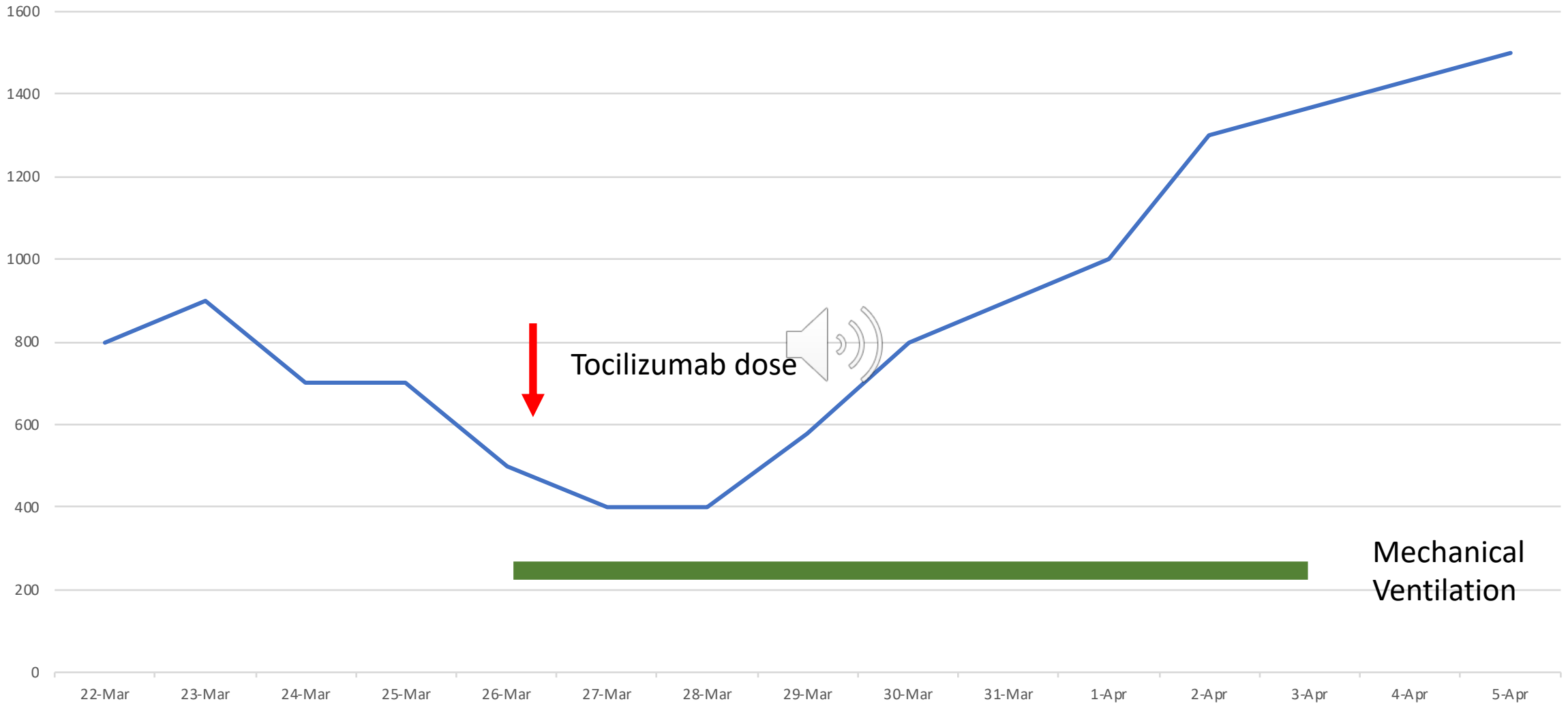


Hydroxychloroquine



Azithromycin

# Absolute Lymphocyte Count

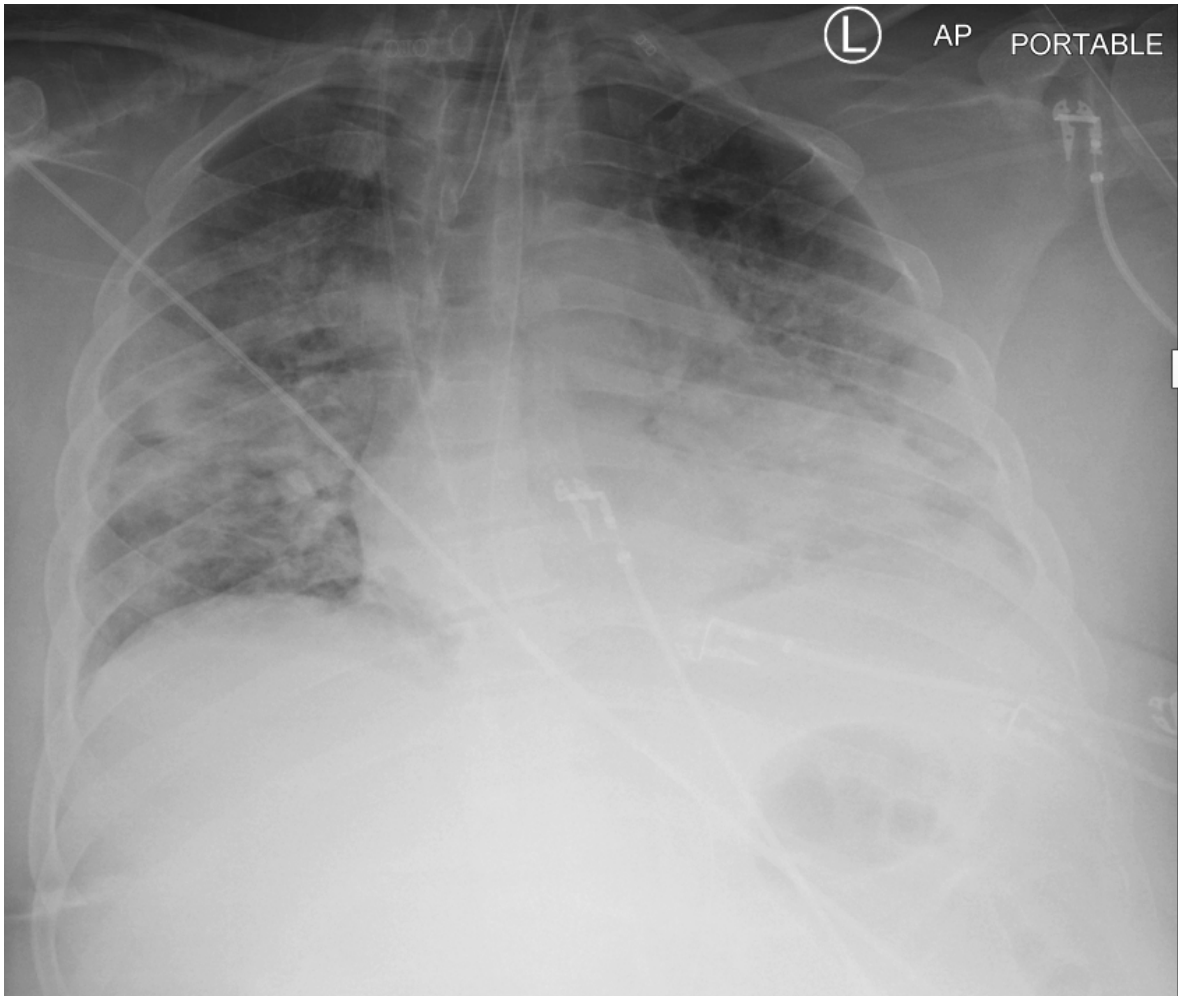


Hydroxychloroquine

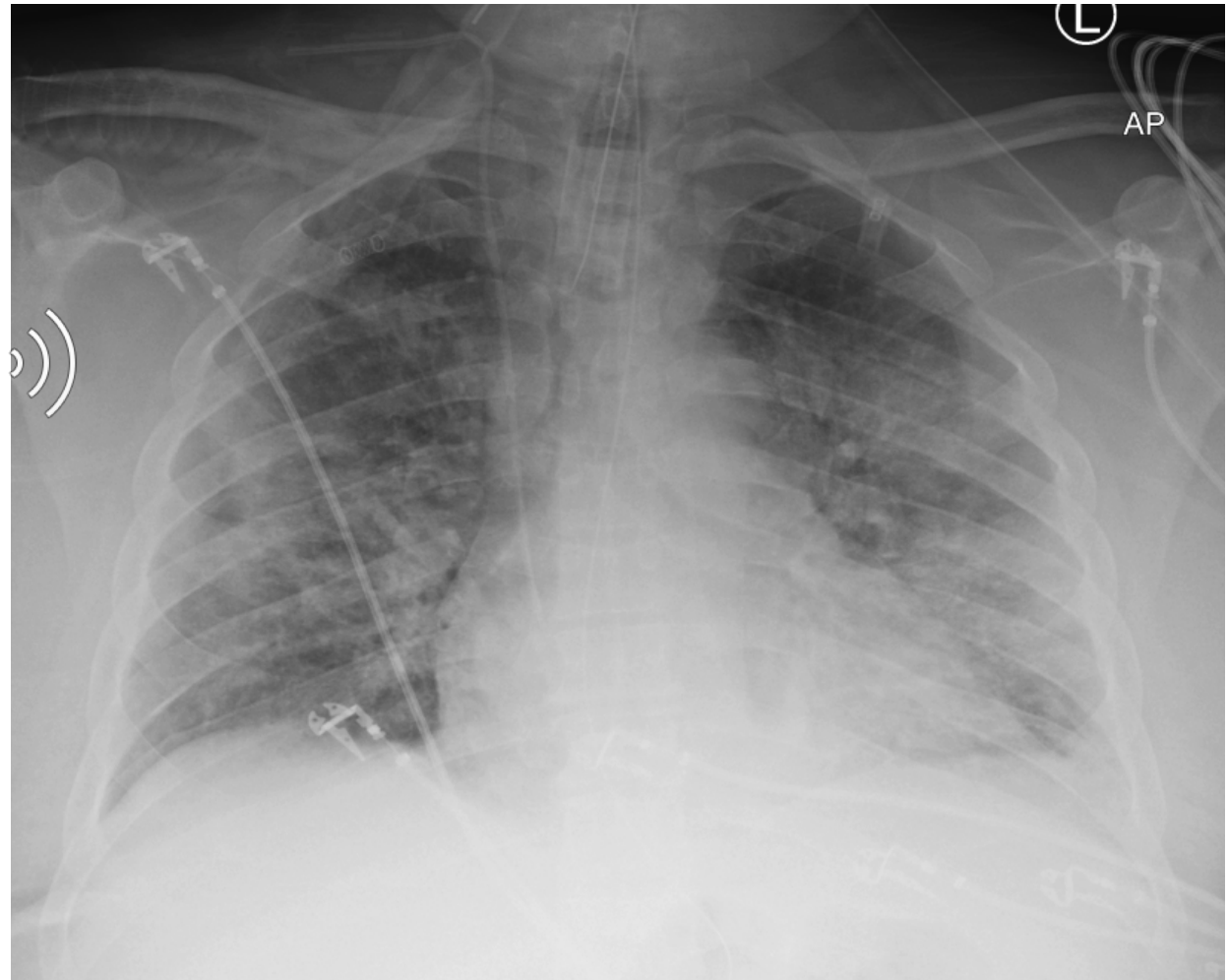


Azithromycin

HD #7 Chest Xray (Day 13 of illness)



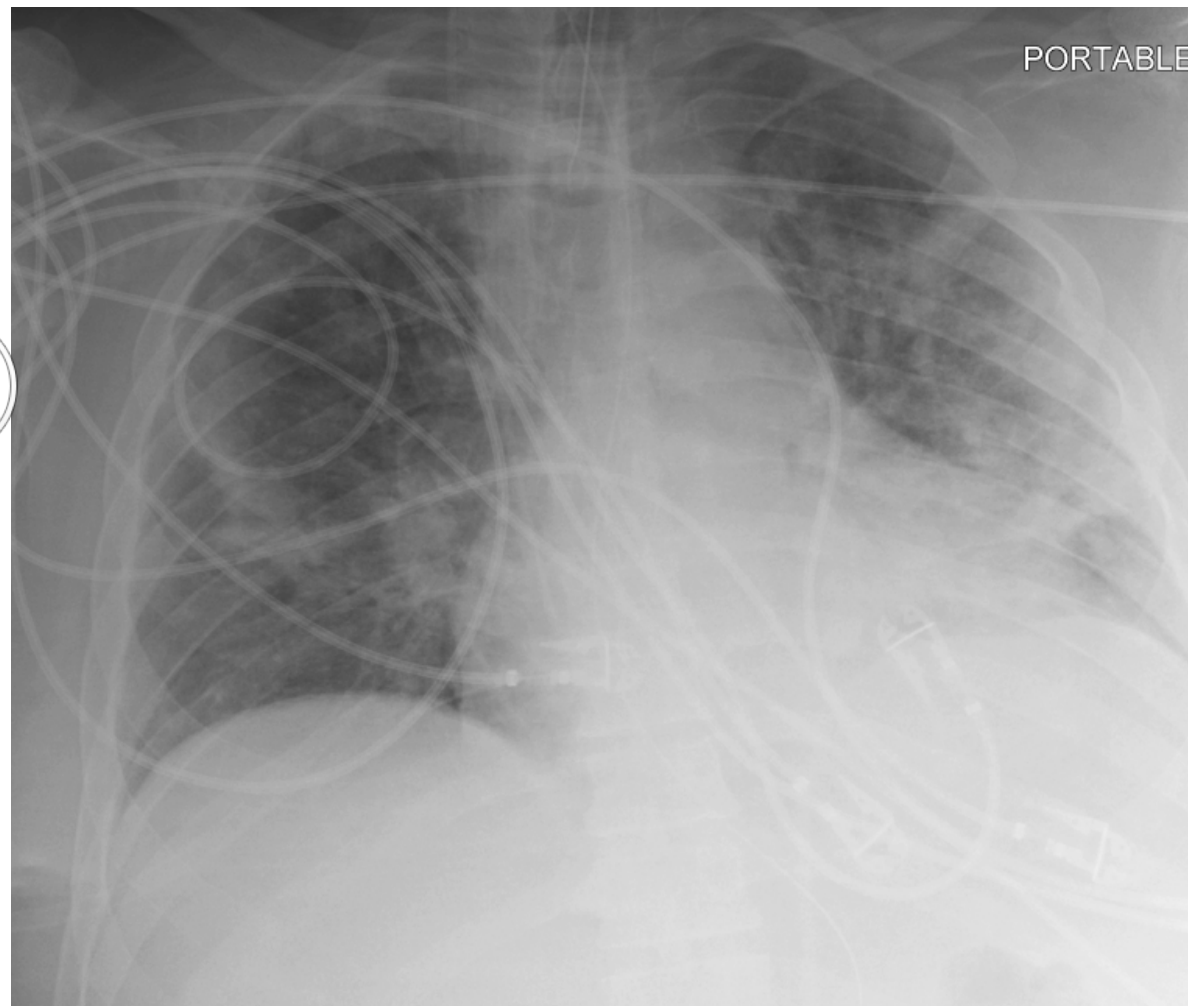
HD# 8 Chest Xray (Day 14 of illness)



HD #11 Chest Xray (Day 17 of illness)



HD# 13 Chest Xray (Day 19 of illness)



# Hospital Course Continued

- Extubated 04/03/20; HD# 12 (Day 19 of illness)
- As of 04/06/20; HD#15 (Day 22 of illness):
  - On 3L nasal canula
  - AAO x3, thrilled to be alive
  - Resolved anorexia, anosmia, ageusia. Now with great appetite
  - Weak requiring assistance to get out of bed





# Disposition

- Nearing discharge
- Aggressive PT/OT
- Expect full recovery

