

## CASE #2

## COVID-19 and Aspergillosis

Submitted by: Ryan Carroll, MD; Peter Pappas, MD  
Institution: UAB  
Email: ppappas@uabmc.edu  
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### HISTORY

**Chief Complaint:** 50-year-old male, shortness of breath, dry cough, fever and worsening hypoxia

#### Medical Hx

CML (on imatinib)  
Coronary artery disease  
Hypertension  
Hyperlipidemia  
Type II diabetes (A1C 8.3)

#### Family Hx

Coronary artery disease  
Type II diabetes

#### Social History

Uses 1 can smokeless tobacco daily  
Occasional alcohol, denies illicit drug use

#### Surgical Hx.

Coronary stents  
Appendectomy  
Cholecystectomy  
Meniscal repair

### REVIEW OF SYMPTOMS:

#### Present

Shortness of breath  
Dry cough  
Fever, Chills  
Worsening hypoxia

#### **MEDICATIONS** – at admission

Aspirin  
Clopidogrel  
Imatinib  
Losartan  
Metformin  
Omeprazole  
Rosuvastatin

### **PHYSICAL EXAMINATION:**

**Vital Signs:** T 103 F; 39.4 C, HR 94, RR 22, BP 116/62

**General:** Awake, alert, mild distress

**Cardio:** RRR, no murmurs, rubs, or gallops.

**Pulmonary:** Wheezes bilaterally, no rales or crackles

**Abdomen:** Soft, nontender, bowel sounds present

**Musculoskeletal:** Strength 5/5 in extremities.

**Lymph:** No significant lymphadenopathy

**Skin:** No rashes

## **ADMISSION LABS**

### **CHEMISTRY/METABOLIC PANEL**

Creatinine 1.9 (baseline 1.1)

AST 77

ALT 83

LDH 284

### **CBC**

WBC 4

### **Other labs**

Ferritin 779

COVID-19 PCR positive

Baseline Chest X Ray



## **TIMELINE OF HOSPITAL COURSE/IMAGES**

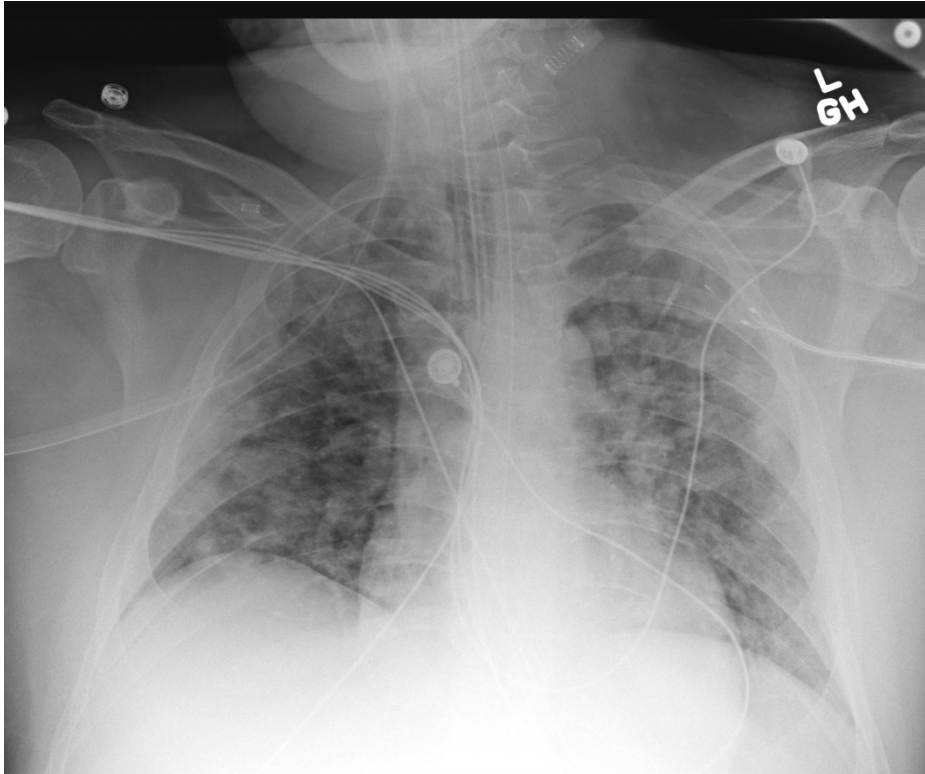
Day -5: Respiratory symptoms, fever, COVID-19 positive

Day 0: Admission

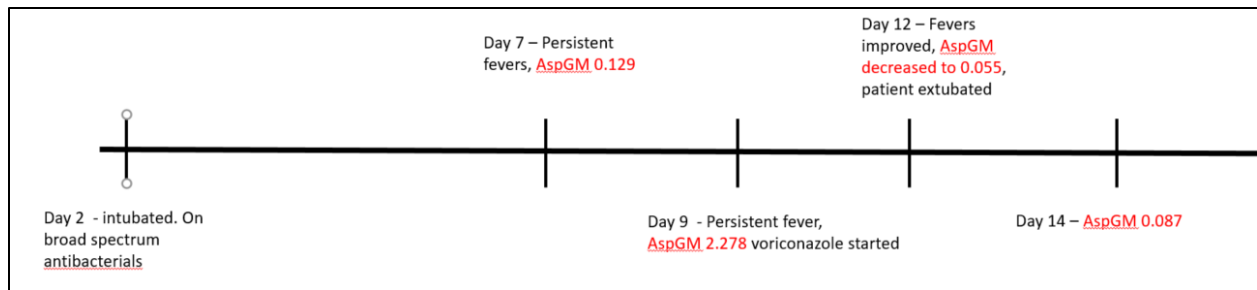
Started dexamethasone and remdesivir

- Day 2: Worsening hypoxic respiratory failure, intubation  
Blood and sputum cultures- negative  
Vancomycin, cefepime and azithromycin (Day 1-3), then stopped
- Day 5: Persistent fever, worsening respiratory status  
Serum Cryptococcus Ag – negative  
Urine Histoplasmosis Ag- negative  
Urine Blastomycosis Ag- negative  
Urine Legionella Ag- negative  
Serum AsperGM 0.129 (nl < 0.5)

Day 5 – Chest X-Ray



- Day 9: Persistent fever, no improvement in oxygenation  
Reinitiated broad-spectrum antimicrobials: vancomycin, piperacillin-tazobactam, and micafungin  
Bronchoscopy BAL: *Proteus mirabilis* (low colony count)  
Serum AsperGM repeated (2.278)  
Voriconazole initiated
- Day 12: Serum AsperGM (0.055)  
Improved oxygenation and fevers; extubated on Day 12
- Day 14: Serum AsperGM (0.087)



- Day 22: Discharged to rehabilitation facility  
Continued Voriconazole for 6 weeks as outpatient
- Day 84: F/u as outpatient 6 weeks after D/C. No residual cough, shortness of breath or sputum production