



# 11/15/22 Morning Report with @CPSolvers



**Case Presenter:** Debora Loureiro (@deboracloureiro) **Case Discussants:** Ravi Singh (@rav7ks) and Madellena Conte (@MadellenaC)

**CC:** 37F HTN and SOB

**HPI:** Spends six months in US and six months in India each year. Regular Primary care visits every six months. No Hx of HTN or renal dz.

5days earlier developed Dyspnea and since 2d orthopnea, took 200mg ibuprofen 1d ago -> no improvement.

Crea 5.2 mg/dl

No recent travels

Nicardipine drip started on ICU

**PMH:**

**Fam Hx:**

**Meds:**

**Soc Hx:**

**Health-Related Behaviors:**

**Allergies:**

**Vitals:** BP: 263/168 SpO<sub>2</sub>: 99% on room air, rest nl

**Exam:**

**Pulm:** basal crackles

**Fundoscopy:** Hypertensive retinopathy grade 3

**Notable Labs & Imaging:**

**Hematology:**  
WBC: 6.6 Hgb: 10 Plt: 115

**Chemistry:**  
Na: 141 K: 3.8 Cl: 105 CO<sub>2</sub>: 22 BUN: 42 Cr: 5.2 glucose: Ca: Phos: Mag:

AST: ALT: Alk-P: T. Bili: Albumin:  
BNP: 18 000

**Imaging:**  
CXR: bilateral pleural effusions

**UA:** large protein, moderate, blood, no casts no white cells or bacteria

C3/4 neg, ANA, ANCA, rheum workup, thyroid labs normal  
Cortisol, renin, aldo normal

**Renal US:** no evidence of renal artery stenosis, symmetric kidneys  
**Renal biopsy:** consistent w/ accelerated HTN

**Dx: Malignant HTN -> renal failure**

**Problem Representation:** 37F presents w/ acute HTN and SOB. BP was measured at 263/168. Labs revealed elevated Creatinine, BNP and proteinuria. Renal biopsy was consistent w/ accelerated HTN and led to the diagnosis of malignant HTN.

**Teaching Points (Debora):**

Orthopnea → look for other signs of cardiac dysfunction: JVP, murmurs, edema.

HTN is the cause of the SOB? Or the SOB the cause of HTN?

SOB: cardiopulmonary > others: blood (anemia, acidosis), anxiety, neuromuscular disease, thyrotoxicosis.

Creatinine of 5.2 look for the baseline

**Hypertensive emergency** 180/120 mmHg + organs affects: Aortic dissection, eclampsia, endocrinopathy (pheochromocytoma), hypertensive encephalopathy, cardiogenic pulmonary edema, acute renal failure. The goal is BP go down 25%

**Malignant HTN:** can cause ischemic damage to multiple organs damage to multiple organs: brain, kidney and heart.

Epidemiology: black patients, marked elevations in blood pressure, and patients w/ chronic renal disease, particularly diabetic nephropathy.

Lab: Protein elevated (usually around 1g/day).

Treatment: max 25% BP reduction, beware: cerebral hypotension. Long Term BP is 125-130/80 mmHg.

BP regulation impaired due to chronic HTN -> blood vessel remodeling.