Chief Complaint

“My legs are purple.”
HPI

- 52 year old man with past medical history significant for recent diagnosis of bilateral DVTs and bilateral pulmonary emboli (2 months PTA)
  - Treated with enoxaparin, warfarin, and Greenfield IVC filter placement

- Past medical history also significant for Factor V Leiden heterozygosity.

- Lost to follow up for PT/INR monitoring.
HPI

- He presented to an outside hospital with several day history of blue/purple discoloration of his toes with ascending extension of a purplish hue to his bilateral feet and legs (to the level of his calves)
- Discoloration was associated with worsening pain and swelling. Pain was noted to be worst at the tips of all toes.
- He also complained of weakness and a five day history of black tarry stools
- One episode of vomiting (emesis “dark” in color)
Past History

- Additional Past Medical History:
  - L1 compression fracture, diagnosed 2 months prior to admission
  - Depression
  - History of esophageal stricture
  - Anemia (“multifactorial”)
Past History

- **Surgical History:**
  - Multiple orthopedic surgeries to his left leg after sustaining heavy machinery-related traumatic injuries in 2003
Past History

- **Meds:**
  - Warfarin 7.5 mg PO daily
  - Started 2 months prior to admission
    - Unmonitored, last INR unknown

- **Allergies:**
  - NKDA

- **Health Maintenance:**
  - Influenza: Never Received
  - Pneumovax: 2011
  - T DaP: Unknown
Past History

- **Family History**
  - DM, HTN
  - Mother, deceased (CAD)
  - Father, deceased (CAD)
  - Denies any history of clotting disorders
  - Denies any history of malignancies
Past History

- Social History:
  - Significant tobacco history of 1-2 ppd x > 40 years
    - Quit 2 months prior to admission
  - ETOH use
    - Approximately 6 x 12 ounce beers per day x 30 years
    - No history of alcohol withdrawal or delirium tremens
  - Remote history of cocaine use > 25 years ago
  - Remote history of methamphetamine use > 10 years ago
  - Currently unemployed, formerly worked as an electrician
  - Single, not currently sexually active
  - Lives with friends
ROS

- Positive:
  - Generalized cachexia over the past several months, unspecified
  - Chronic back pain
  - Chronic dry cough

- Negative:
  - Fevers, Chills
  - Dysphagia, Epistaxis
  - Chest Pain, Dyspnea, Orthopnea, PND.
  - Hemoptysis
  - Dysuria, Hematuria, Urinary Urgency, Flank Pain, Penile Discharge/Lesions
  - Denies Recent Travel, Sick Contacts
Vital Signs & Physical Exam
Vital Signs

- Temp: 98.4° F
- Pulse: 90/min
- RR: 20/min
- BP: 110/86 mmHg
- Pulse Ox: 96% on RA
- Weight: 65 kg
Physical Exam I

● General:
  - Appears older than stated age, thin/cachectic, pale, alert and oriented, in visible pain

● HEENT:
  - Bitemporal wasting, NCAT, PERRLA approximately 3-4mm, EOMI, small scab on left brow, clear oropharynx, no mucosal abnormalities

● Neck:
  - No LAD, no thyromegaly, trachea is midline
  - Right IJ triple lumen central line in place with oozing of blood beneath the tegaderm, left EJ in place
  - Difficult to assess JVP secondary to line placement
Physical Exam II

- Cardiovascular:
  - Tachycardic, no murmurs/rubs/gallops

- Pulmonary:
  - Positive breath sounds bilaterally, slightly diminished in left lower lung fields
  - Occasional scattered expiratory wheezes
  - No crackles, no egophany

- Abdomen:
  - Scaphoid, non distended, bowel sounds normal, soft, non tender, no HSM
Physical Exam III

- **Extremities:**
  - BLE with diffuse non-blanching purple discoloration with large bullae-like blisters extending from the foot to approximately 3-4 cm below the knee
  - LLE significantly edematous to mid thigh and somewhat cool to touch
  - BLE extremely tender to palpation
  - Range of motion limited secondary to pain
  - Arterial signals and bilateral posterior tibial and dorsalis pedis pulses dopplered
  - Cyanosis at nail beds with some mild clubbing
  - Mild discoloration of 3rd and 4th digits of bilateral hands
Physical Exam IV

- Neurologic:
  - No abnormalities on CN exam
  - Diminished pinprick sensation bilaterally on the dorsum of both feet
Day of Admission

Laboratory Data
Labs : Franklin Medical Center

- Hemoglobin/hematocrit 3 gm/dL/11%
- WBC 28,000 (4.5-11.0)
- Creatinine 2.4 (0.5-1.10)
- D-dimer >5,000 (<231)
- Incalculable INR
- PT >80, PTT > 105 (9-12.7) (24-37)
- FOBT positive

- Transfused pRBC’s
- Transferred to Chabert Medical Center
Chabert Hospital Course

- Admitted to the ICU with diagnosis of GI bleed where he received 4 units of FFP and 2 additional units of pRBCs
- Warfarin held, patient started on a heparin gtt as well as a omeprazole gtt
- Started on empiric vancomycin, piperacillin/tazobactam, and ciprofloxacin
- Echocardiogram reportedly revealed no abnormalities
- Evaluated by General Surgery => thought to have phlegmasia cerula dolens
- Transferred to University Hospital for evaluation by Vascular Surgery and possible vascular thrombectomy
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Day of Admission
CXR
CXR

- Bibasilar hazy opacification as well as blunting of both costophrenic angles
- Likely pulmonary edema and bilateral pleural effusions
Map 1
170dB/C 2
Persist Off
2D Opt:FSCT
Fr Rate:Targ
SonoCT™

1.22cm
1.11cm
3.66cm
1.06cm²

RT CFV / NOT FULLY COMP
Map 1
170dB/C 2
Persist Off
2D Opt:FSCT
Fr Rate:Targ
SonoCT™

RT GSV HI / NOT FULLY COMP
Lower Extremity US

- Thrombus present in Bilateral Common Femoral, Superficial Femoral, Popliteal, Posterior Tibial veins.

- Thrombus is occlusive at the bilateral middle superficial veins
HOSPITAL DAY 1
Initial Management

- Admitted to ICU at approximately 0150
- Transfused additional 4 units FFP
- Vascular Surgery and wound care consulted
- Heparin gtt continued

- BCx x 2, UCx were obtained and antibiotics were continued

- 2 episodes of large melanotic stools noted
  - Additional 3 units pRBCs transfused
Hospital Course: Day 1

- Dermatology service was consulted => biopsies taken
- Gastroenterology service consulted
- Mental status became progressively more altered
- Neurology service consulted
- CTA Head and Neck obtained
  - No findings to explain mental status change
  - 3.4 x 1.7 cm soft tissue mass right midlung
- EEG consistent with diffuse cerebral dysfunction consistent with an encephalopathic process
- Ativan taper started
Hospital Course: Day #2

- Cryoglobulin negative
- Protein C low 33 (74-151)
- Protein S low 45 (60-155)

- **FACTOR V LEIDEN**
  - Single R506Q mutation identified (heterozygote) which makes Factor V Leiden more resistant to inactivation by activated protein C

- Transitioned to full dose Fondaparinux; heparin gtt discontinued
Hospital Course: Day #3

- All cultures negative x 48 hrs, antibiotics discontinued

- Skin punch biopsy results reported
Hospital Course: Day #4

- Stepped down to general medicine service
- INR at the time was 1.4
- Ativan taper completed
- Hematology/Oncology was consulted
- Pulmonary was consulted
Hospital Course: Day #5

- EGD was performed that showed no source of GI bleed
- Colonoscopy deferred
Discharge/Transfer Medications:

- Fluticasone / Salmeterol inhaler
- Albuterol inhaler
- Tiotropium Bromide inhaler
- Fondaparinux 7.5 mg
- Morphine
- Docusate
- Omeprazole
Chabert Hospital Course

- Bronchoscopy was performed for evaluation of lung mass:
  - Negative for evidence of malignancy
- Started on amitriptyline to address neuropathy and depressive symptoms
After Diagnosis

- After an additional week of hospitalization at Chabert, the patient was discharged home with wound care.

- Approximately 1 month after initial presentation, he required bilateral AKAs.

  - Pathology:
    - Both feet showed extensive gangrenous necrosis.
    - Leg ulcers showed skin necrosis with associated stasis changes and abscess formation.
    - Severe venous clotting seen in all sections.
    - Anterior and posterior tibial arteries showed moderate to severe atherosclerosis.
FINAL DIAGNOSIS

Warfarin Induced Necrosis
Thank You