**Date: 09/19/2022**

Full name: M.S

Address: New York, NY

Date of Birth: 07/05/1971

Location: Metropolitan Hospital

Religion: Catholic

Source of Information: Self

Reliability: Reliable

Source of Referral: Self

Mode of Transport: Self

**Chief Complaint: “Swelling and Pain in my finger” x 5 days**

**History of Presenting Illness**:

51 y/o Hispanic female with PMHx of Asthma presents to the ED with complaints of swelling along her entire right 4th digit x 5 days. She states that during the past 3 days the swelling has gotten worse and is now associated with pain. She describes the pain as constant, 10/10, radiating from her finger to her right elbow. She states that she finger feels warm and is pruritic. She also endorses nausea, and pus drainage from the finger today. She states the pain is worse when she tries to move her finger and states she is unable to fully bend or extend the finger. She denies any direct trauma to the hand or fingers, fever, vomiting, or recent illness. She states that she applied Vicks rub to the hand and fingers without relief and she took 2 tablets of Tylenol yesterday with some relief. There are no other complaints at this time.

**Dominant hand is a pertinent historical point\***

**Past Medical History**:

- Mild intermittent asthma

**Past Surgical/Procedural History**:

- Augmentation Mammaplasty (Silicone)

- Colonoscopy w/ biopsy

**Medications:**

- Albuterol, Xanax, Bisacodyl, Symbicort, Prednisone.

**Allergies**:

-No known drug, food or environmental allergies.

**Family History:**

Mother – 75 years old, HTN

Father –Deceased from MI, 2019

Brother – No medical hx

**Social history:**

- She is married and lives in an apartment with her husband, and her youngest daughter

- She is currently unemployed

- She denies alcohol use

- Denies illicit drug use

- Denies cigarette or cannabis use

**Review of system**

General - Denies fever, fatigue and chills

Skin, hair, and nails – Endorses erythema, warmth, pruritis, pus drainage from the 4th right digit. No rash

HEENT – Denies any headaches, changes in vision or hearing

Mouth– denies laceration or bruises

Neck – denies pain or swelling

Breast – denies pain

Pulmonary system – denies cough, shortness of breath or wheezing

Cardiovascular system - denies chest pain or palpitations

Gastrointestinal system – Endorses nausea. Denies abdominal pain, vomiting

Genitourinary system – denies dysuria, hematuria

Menstrual /obstetrical – denies abnormal bleeding

Nervous – denies dizziness, weakness, falls, numbness or tingling of right knee.

Musculoskeletal – complains of pain and swelling in the right 4th digit. Denies any direct trauma.

Peripheral vascular system – Denies any pain in calves

Hematological – denies spontaneous bleeding

Endocrine system – denies polydipsia

Psychiatric – denies depression.

**Physical exam:**

**Vital signs:**

BP (Left arm, sitting) 132/ 58 mmHg

Pulse: 56 bpm RRR

RR: 16 breaths/min unlabored

T: 37.1 C oral

O2 sat: 98% on room air

BMI: Weight: 135lbs, Height: 4’9 = 29.2 kg/m^2

**General appearance:** Hispanic female, is alert and oriented to person, place and time. She appears in no acute distress. Not ill or toxic appearing. Well-developed, nourished with normal affect and is cooperative.

**Skin, hair, and nails**: No Jaundice. Skin of 4th right digit is erythematous along the dorsum, edematous, and warm to touch predominantly over the middle phalanx. Erythema and edema extending up the hand. Small bluish discoloration and small open wound over the middle phalanx.

**Head:** Atraumatic and normocephalic.

**Eyes:** PERRLA. Sclera is white without icterus. Extraocular movements intact.

**Ears**: Non-tender. Ear canals are not obstructed, and TM is intact.

**Nose**: Patent bilaterally. No trauma or deformities of the nose.

**Mouth**: No laceration or bruising of the lips.

**Neck**: Supple, non-tender. No lymphadenopathy noted.

**Throat**: Uvula is midline.

**Pulmonary**: Lungs clear to auscultation bilaterally. No wheezing or rales.

**Cardiovascular:** Normal S1 and S2 with regular rate and rhythm. No murmurs appreciated.

**Abdominal exam**: Soft, non-distended. Bowel sounds present. No guarding or rebound tenderness.

**Breast:** Not performed

**Genitourinary**: Not performed

**Endocrine system**: No diaphoresis. No goiter.

**Neuro exam**: She is alert and oriented x 3. No nystagmus or focal deficit. Sensation intact in bilateral upper and lower extremities.

**Musculoskeletal:** Decreased ROM (extension) in the right 4th digit secondary to pain and pain on palpation over the entire 4th digit. Full active and passive ROM present in wrist and elbow. Able to wiggle all other fingers but the right 4th digit. Swollen finger is held in mid-flexion with tenderness on the dorsal aspect.

**Good exam**

**Peripheral vascular system**: No edema of bilateral lower extremities.

**Psychiatric**: Negative depression screen. No homicidal or suicidal ideation or plan.

**Assessment**:

51 y/o Hispanic female with PMHx of Asthma, presents to the ED with right 4th digit swelling and pain x 5 days. Pain presents with erythema, circumferential digit swelling, pus and pain on palpation of the digit. Finger is in flexion at rest with pain on extension. No signs of systemic illness.

**Differentials:**

1. **Cellulitis**: Affected area is typically associated with pus, warmth, tenderness, and is erythematous. Movement of underlying joints are painful and restricted.
2. **Subcutaneous abscess**: usually due to minor penetrating trauma which could not be determined in the case of this patient. There may be tender fluctuant mass and pain with extension of the digits. Digits can be in flexed posture as in the case of the patient. There may be erythema, mild swelling along the dorsal and palmar aspects as in this patient.
3. **Osteomyelitis**: Usually associated with gradual onset of sxs and patients may present with dull pain w/ or w/o movement. Sxs include tenderness, warmth, edema, erythema and other systemic symptoms (e.g., fever which this patient does not have). Blood cultures (or culture from bone biopsy) and Xray may help confirm dx.
4. **Septic Arthritis:** may present also with red, swollen, warm and tender joint that is painful with motion.
5. **Flexor tenosynovitis**: Patients can have sxs such as tenderness along the flexor sheath, symmetric swelling of the affected digit, finger slightly flexed (seen in this patient), and pain along the tendon with passive extension (Kanavel sign)

**Flexor tenosynovitis is a strong consideration in this patient**

**Problem list**:

1. Acute swelling and pain of the right 4th digit.

**Plan:**

1. Basic labs: CBC, BMP, C-reactive protein

2. Consult hand surgery

3. Administer Intravenous fluids (NS)

4. Obtain Xray of the finger

5. Treat empirically with vancomycin (IV), Unasyn (IV), and Morphine for pain

7. Blood culture was ordered

**Hand elevation as part of plan**

**Follow- up findings:**

1. Xray results did not show fracture, dislocation, foreign body or signs of osteomyelitis. There was however marked soft tissue swelling
2. CBC: showed elevated neutrophil count at 71.6% and low lymphocytes at 20.3.
3. BMP: normal except for lower creatinine (0.5)
4. CRP: elevated at 9.6mg/L
5. Ultimately and I&D was performed by hand surgery without pus (just blood) and to be followed up with plastic surgery, given Augmentin for outpatient tx.

**Due to the risks associated with these cases, generally they are admitted for IV antibiotics and carter block to keep the hand elevated. Possibly a different culture at metropolitan hospital. Good case.**