#### **CC**: acute left eye vision loss

HPI: 53-vear-old woman.

- Symptoms started ~1 week
- Left eye vision loss (constant, sees shadows, only able to see things that are <1 ft away), decreased left eve color discernment, intermittent left eye pain (worse w/ light and eye movement), left facial numbness
- No fevers, chills, night sweats, wt loss, SOB, cough, no known triggers, no recent trauma, no sick contacts

#### PMH:

- Cluster headaches as a teen

#### FH:

- none: family from Barbados. born and raised in England

#### SH:

- EtOH / tobacco / drugs: denied

#### OCCUPATION:

-Traveling RN within the US -Came to CA to help during Covid surge; previously worked in FL, AL, and MN

#### **OUTPATIENT MEDS:**

- none

#### **PHYSICAL EXAM:**

Tmax: 36.7C, BP: 104/65, HR: 62, RR: 20, SpO2: 100% on RA **HEENT:** 

Right: 20/20, IOP 22, PRRL, no APD, red desaturation 100% Left: Count fingers @ 1 ft, IOP 19, PRRL, +APD, red desaturation 0%

No other abnormalities seen on ocular / optho exam Neck supple, no rigidity

**Skin:** No rashes or lesions

Neuro: AOx3, left CN V1 + V2 + V3 decreased sensation, no facial droop, strength + sensation in extremities grossly normal

#### LABS: 8.0 4.0 102 12 141 0.3 < 0.2 24 0.8 18 19 CT Head WO Con: nml CRP: 1.9 119 CTA Head Neck: nml ESR: 38 CT perfusion: nml

Covid-19: neg

MRI Brain W WO: Enhancement of prechiasmatic portion of L optic nerve

ANA: none detected

NMO: neg

MR C & T spine W WO:

MOG Ab: neg No intramedullary cord lesions or abnml SSA / SSB: nml enhancement to suggest demyelinating disorder.

Enlarged R paratracheal LAD (up to 2.8cm)

HIV: neg

Syphilis: neg

CT Chest W Con:

Multiple mediastinal LAD (R paratracheal, R hilar...)

#### PROBLEM REPRESENTATION:

Middle-aged woman w/ hx of cluster migraines, presenting w/ chronic headaches & acute left eye vision loss + decreased color discernment, left eye pain, & left facial numbness, found to have...

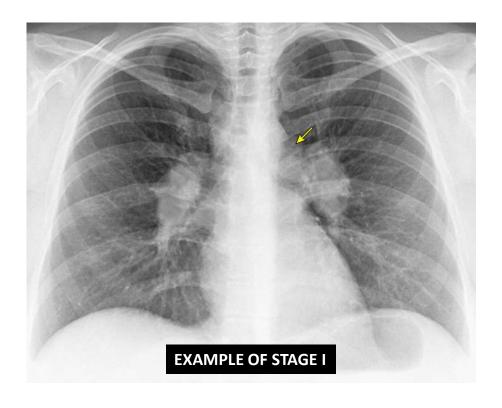
# SARCOIDOSIS

### **SARCOIDOSIS**

- Granulomatous disease that can affect all organ systems
- Non-necrotizing (non-caseating) granulomas
- African Americans 2-3x > Caucasians
- Females 2x > males
- Young adults

## **PULMONARY SARCOIDOSIS**

- Stage I: Bilateral hilar adenopathy
- Stage II:
   Bilateral hilar
   adenopathy and parenchymal
   involvement (most commonly
   reticulonodular opacities)
- Stage III:
   Parenchymal involvement w/out adenopathy
- Stage IV: Fibrosis



#### The Stages of

### **Pulmonary Sarcoidosis**

The stages of sarcoidosis can be confusing, especially for newly diagnosed patients. The use of numbered stages implies that these categories indicate the severity or progression of the disease, however they are simply for categorization. They help describe the location and nature of the disease, not severity.

#### Stage 0

#### NO SARCOIDOSIS

The patient presents with a normal x-ray. There is no sign of granulomas.



#### Stage I

#### LYMPHADENOPATHY

Granulomas are only present in the lymph nodes.



#### Stage II

### LYMPHADENOPATHY AND PULMONARY INFILTRATES

Sarcoidosis is present in the lymph nodes and lung tissue.



#### Stage III

#### **PULMONARY INFILTRATES**

Granulomas are only present in the lung tissue.



#### Stage IV

#### **PULMONARY FIBROSIS**

There is scarring in the tissues of the lungs, indicating irreversible damage.



For more info on sarcoidosis, visit



## **EXTRAPULMONARY SARCOIDOSIS**

Can affect all organs

• Skin, eyes, RES, MSK, exocrine glands, heart, kidney, CNS

## EXTRAPULMONARY SARCOIDOSIS - OCULAR

- Up to 25% of pts with sarcoidosis
- Females > males
- African American and Japanese populations
- Intraocular: uveitis
- Extraocular: lacrimal glands, conjunctiva, extraocular muscles, optic sheath

# LOFGREN SYNDROME

- Specific acute presentation of systemic sarcoidosis
- Bilateral hilar lymphadenopathy
- Erythema nodosum
- Arthopathy

### SARCOIDOSIS TREATMENT

Initial: glucocorticoids

• Refractory / intolerance to steroids: immunosuppression agents (MTX, azathioprine, leflunomide, or TNF $\alpha$  inhibitors)

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Middle-aged woman w/ hx of cluster migraines, presenting w/ chronic headaches & acute left eye vision loss + decreased color discernment, left eye pain, & left facial numbness, found to have...

<u>DIAGNOSIS:</u> SARCOIDOSIS w/ neurologic + ocular involvement

#### **LEARNING POINTS:**

- Stages of pulmonary sarcoidosis
  - Stage I: B/L hilar adenopathy
  - Stage II: B/L hilar adenopathy and parenchymal involvement
  - Stage III: Parenchymal without adenopathy
  - Stage IV: Fibrosis
- Lofgren syndrome
  - Specific acute presentation of sarcoidosis; B/L hilar lymphadenopathy + erythema nodosum + fever (+ arthritis)
- Treatment
  - Initial: glucocorticoids
  - Insufficient response / intolerance to steroids: immunosuppressive agents (MTX, azathioprine, leflunomide, or TNFα inhibitors)