

# Jaw Pain and Visual Changes

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Surgery with Dr. Rayhanabad  
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# Chief Complaint and HPI

- CC: Jaw pain and blurry vision
- 52 yo Hispanic female presents to the clinic with L temporal vessel dilation, episodic jaw claudication, and visual changes in L eye for the past week. Pt characterizes her jaw pain as sharp when chewing and states it is a 6/10 at rest, and is exacerbated to a 9/10 when eating. Pt has not taken any medication for pain and admits to a loss of appetite for the past week. Pt had noticed her vision become intermittently blurry for a few days, which prompted her to go the ED. She was referred to ophthalmology and rheumatology, who agreed temporal artery biopsy is indicated

# ROS Pertinent Positives/Negatives

- Jaw claudication
- Intermittent blurry vision
- Loss of appetite
- Arthritic symptoms in BLE joints
- Denies headache
- Denies chest pain
- Denies SOB
- Denies abdominal pain, nausea, vomiting, diarrhea, constipation

# Medical History

- PMH
  - Fibromyalgia
  - Ophthalmoplegic Migraine Headache
  - Cholelithiasis
  - Lipoma
  - Lymphadenopathy
  - R Ovarian cyst
  - Acute bronchitis
- PSH
  - 2 Cesarean sections
  - Appendectomy
  - Hysterectomy
  - Oophorectomy Unilateral L side
- Meds
  - Prednisone 10mg qdaily

# Medical History

- ALL
  - Ibuprofen—hives
  - Imitrex—hives
- FH
  - Mother, deceased at 59—  
SLE/Scleroderma/CHF
  - Sister, living—  
Fibromyalgia/SLE
  - Brothers, living—CHF
  - No family hx of CA
- SH
  - Currently married
  - Tob: denies current and past history of tobacco usage
  - EtOH: denies current and past history of alcohol usage
  - Illicit drugs: denies usage
  - Currently employed

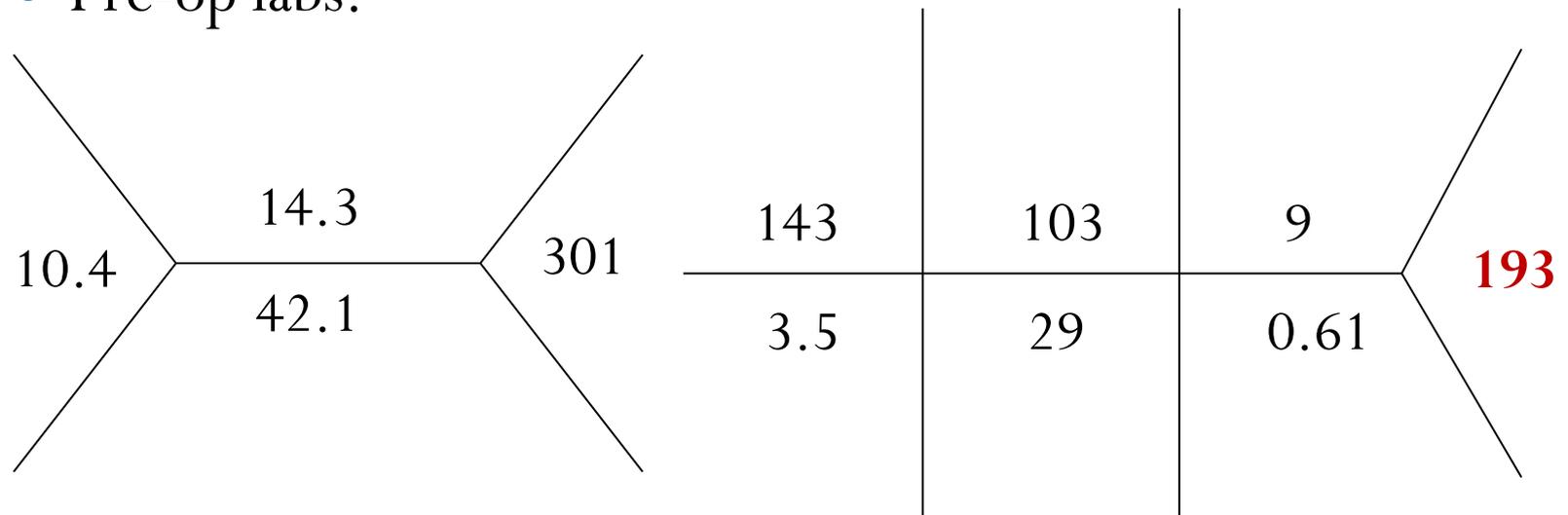
# Physical Exam

- Genl: Well nourished, well developed female sitting comfortably on exam table, alert and oriented in NAD
- HEENT: **no nodularity or pulsation palpated in L temporal region, dilated L temporal artery, TTP L temporal region, no masticator muscle tenderness, no mandibular deviation upon mouth opening**, NCAT, PERRLA, EOMI, Normal conjunctiva, moist mucous membranes, no pharyngeal erythema
- Neck: Supple, non-tender, no cervical lymphadenopathy, no carotid bruit, no JVD, no thyromegaly
- Breast: deferred
- CV: RRR, no murmurs, good pulses in all extremities, no edema
- Lungs: CTAB, breath sounds equal, non-labored respirations
- GI: soft, BSx4, non-distended, no guarding, no rebound, no rigidity, no hepatosplenomegaly
- Rectal: deferred
- GU: no CVA tenderness
- Musculoskeletal: **nonspecific TTP BLE, strength 4/5 BLE**, normal ROM, no edema
- Integumentary: Warm, dry, intact, no bruises, no rashes or lesions
- Neuro: AO to person, place, situation, and time, Normal sensory, normal motor, CN II-XII grossly intact, BL DTRs 2+ biceps, brachioradialis, patellar
- Cognition and Speech: Speech clear and coherent
- Psych: Cooperative, Appropriate mood and affect

# Vitals and Pre-op labs

- Upon consultation:
- 116/73-18-85-36.7, O2 sat: 97% RA, 6/10 pain scale
- Ht: 167.64cm, Wt: 70.3kg

- Pre-op labs:

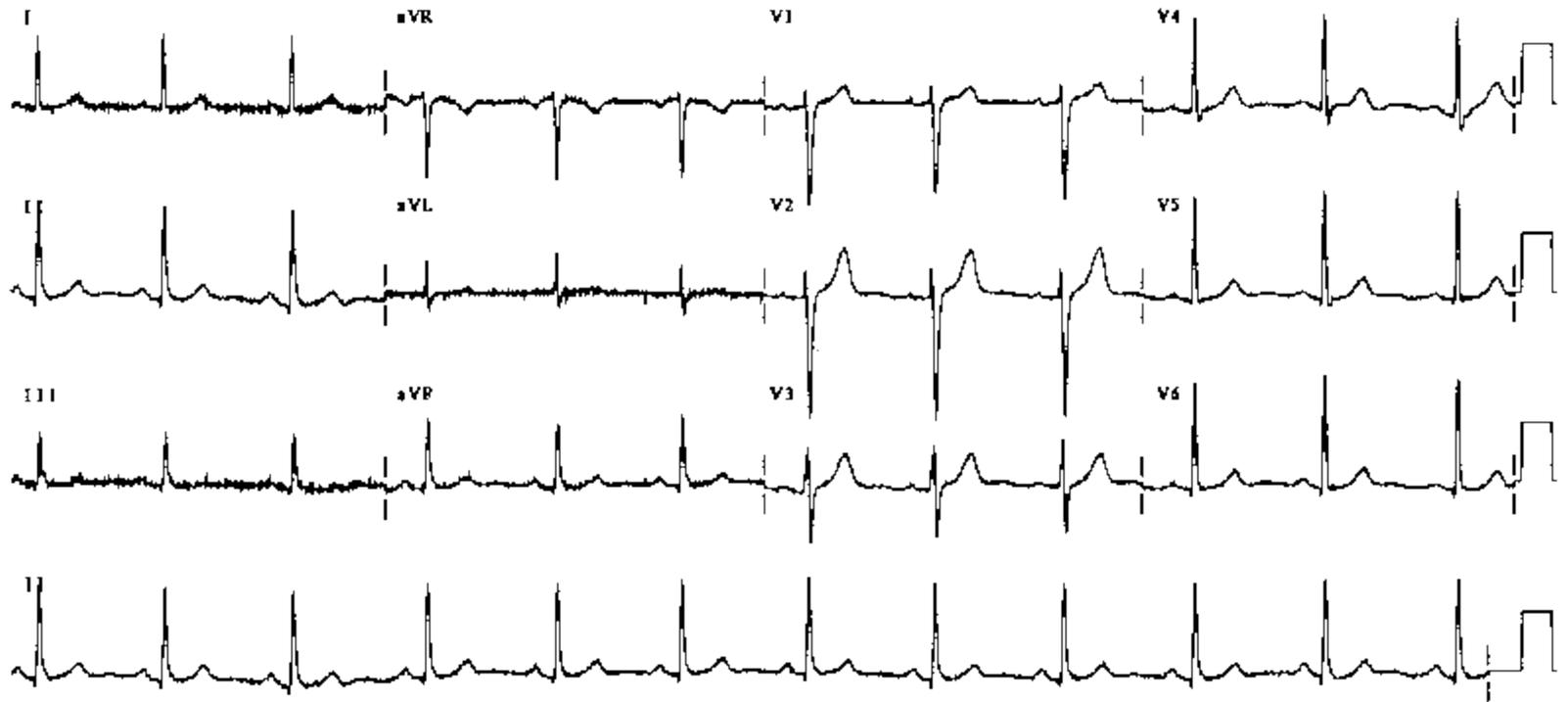


# Laboratory Results

- MCV: 85
- MCH: 28.7
- MCHC: 34
- RDW: 13.7
- Neutrophils: 54%
- Lymphs: 35%
- Monocytes: 10%
- Eos: 1%
- Basophils: 0%
- PT: 10.0 sec
- aPTT: 27 sec
- INR: 1.0
- GFR: 105
- Calcium: 8.8
- UA:
  - Mixed urogenital flora
- ESR: 80
- CRP: no data available

# EKG

- Normal sinus rhythm, Rate 75, No ST-T changes, No ectopy, Normal PR & QRS intervals



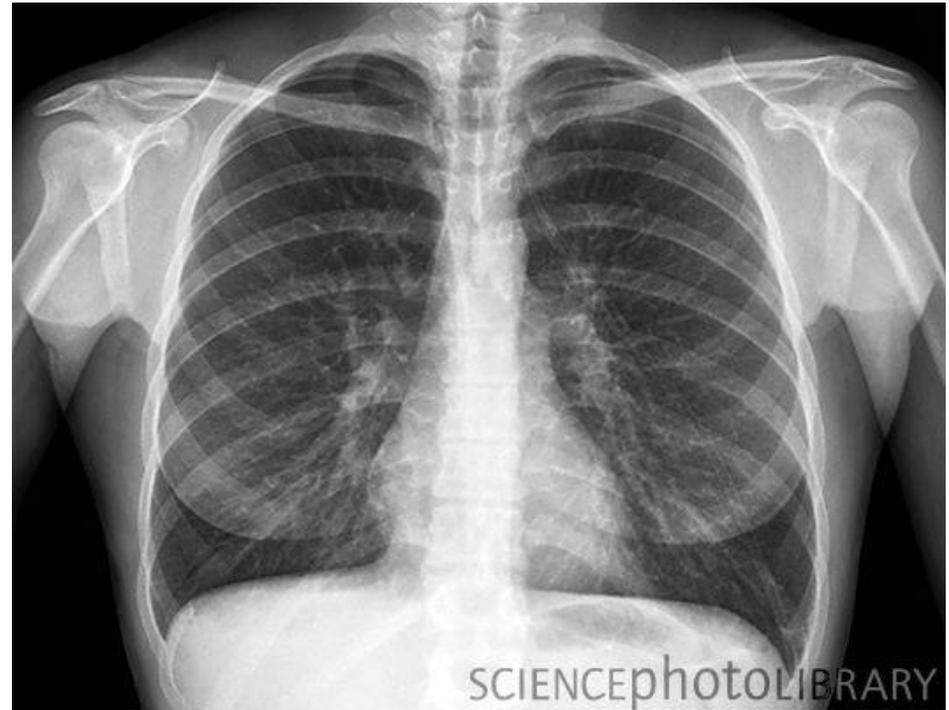
LOC 0000-0000 Speed: 25 mm/sec Limb: 10 mV Chest: 10 mm/mV

50% 0.15-150 Hz

16405

# CXR

- The soft tissues, heart, lungs and bony thorax appear to be normal with no definite infiltrates or mass lesions identified
- There is no evidence of effusion or pulmonary congestion



<http://www.sciencephoto.com/media/393295/enlarge>

# Differential Diagnosis

- Giant Cell Arteritis
  - Elevated ESR
  - Temporal artery dilation
  - Jaw claudication
- Polymyalgia Rheumatica
  - Some tenderness in distal extremities
  - Unlikely considering pt did not have rapid relief of symptoms with prednisone
- TMJ Arthritis
  - Jaw pain exacerbated with movement
  - Unlikely due to absent joint noise, no masticator muscle tenderness, and no deviation or reduced movement of mandible upon mouth opening
- RA
  - Unlikely considering pt is not suffering from small joint polyarthritis
- SLE
  - Unlikely due to pt not experiencing photosensitivity or malar/discoid rash
- Nonarteritic anterior ischemic optic neuropathy
  - Unlikely with patient's clinical presentation

# Assessment and Plan

- Giant Cell Arteritis
  - Temporal artery biopsy
  - Continue prednisone
  - Pending results of pathology report, modify or continue present treatment
  - Monitor with PCP
- Hyperglycemia
  - Likely 2/2 prednisone treatment
  - Monitor with PCP
- Fibromyalgia
  - Continue prednisone 10mg qdaily
  - Monitor with PCP

# Giant Cell Arteritis

- Definition:
  - Inflammation of medium and large arteries usually found in the head and neck
  - Usually involves  $\geq 1$  cranial branch of arteries arising from the aortic arch
    - Ex. Temporal artery
- Age:
  - $> 50$  yo
- Incidence
  - 6.9-32.8 per 100,000 persons  $>50$  yo annually
  - Incidence increases with age
  - F>M: 2-6:1; more common in people with Scandinavian decent
  - Rare in AA
- Prevalence:
  - 1-2 cases per 1000 persons  $>50$  yo

# Giant Cell Arteritis

- Etiology:
  - Unknown
- Associated conditions:
  - Polymyalgia Rheumatica
    - Seen in ~50% of patients with GCA
    - ESR > 40 and/or elevated CRP
    - BL aching and morning stiffness lasting at least 30 min for 1 month or greater
      - Must be in at least 2 areas:
        - Neck or torso; shoulders or arms; hips or thighs

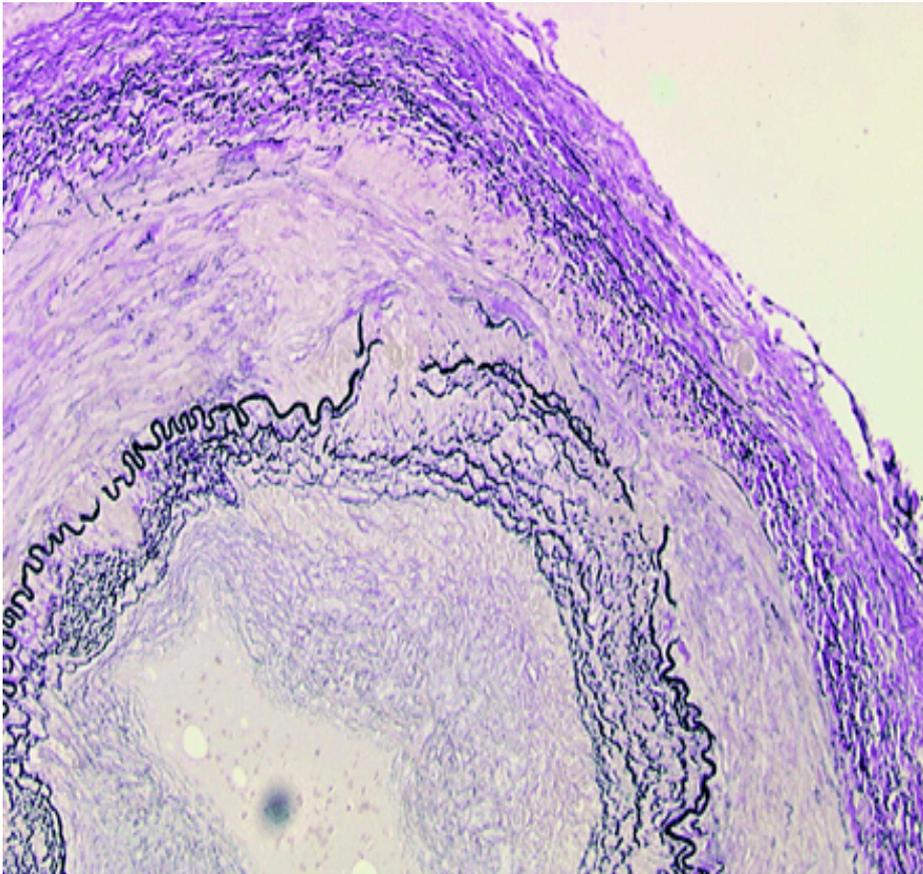
# Our patient:

- Surgical outcome
- Temporal artery biopsy pathology results
- Treatment plan
- Follow-up

# Surgical Outcome

- Patient was admitted to Same-Day surgery for temporal artery biopsy
- Pt was draped in sterile fashion in the OR and administered local anesthetic
- Upon completion of the procedure, pt is scheduled to be discharged home within two hours
- Directions upon discharge:
  - After 24 hours, pt can shower and wash site. Make sure to keep biopsy site clean and dry
  - Apply bacitracin on incision twice daily
  - Advance diet as tolerated
  - If questions/concerns, excessive bleeding, nausea, fever, shortness of breath, or pain that cannot be controlled with prescribed medication, call physician
  - Post-op follow-up within 1 week to remove sutures and receive path results

# Pathology results



- Positive for granulomatous inflammation and multinucleated giant cells
- Consistent with GCA diagnosis

<http://bjo.bmj.com/content/89/2/240.1.full>

# Treatment Plan

- Since pt has a positive result for GCA, there is no need to perform a biopsy on the contralateral side
- Patient is currently on prednisone. Patient likely to remain on glucocorticoids for treating both her fibromyalgia as well as her GCA symptoms. ESR must return to normal before initiating tapering of glucocorticoids
  - If symptoms return, a dose increase will be necessary. Generally, patients require glucocorticoids for at least 1-2 years
- Patient must take vitamin D, calcium, and bisphosphonates to prevent osteoporosis due to long-term glucocorticoid therapy
- Patient must also start low-dose ASA to decrease risk of vision loss and CVA

# Follow-up

- Patient returned to clinic on postop day 8
- Patient states her jaw pain has mildly improved
- Incision healed well, no erythema, no drainage
- Staples removed
- Continue with treatment plan and monitoring by PCP

# References

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