Supplemental Digital Content.

Chief Complaint: "I have been having bad headaches for 3 weeks." Also a Type 2 Diabetic and reporting "allergies."

Detailed History of Present Illness:

J.S. is a 38-year-old male who presents to the clinic today for evaluation of headaches that started 3 weeks ago. Since the **headaches** started, he notices that he has been waking in the mornings with a mild to moderate intensity headache. The headaches are easily relieved by ibuprofen 600 mg in the morning, but then reappear around noon when he thinks that the medication has worn off. He reports sensitivity to light with his headaches, which has been interfering with his ability to work from home. He has been participating in a lot of zoom meetings lately and will stay up late working on the computer. Since the pandemic started in March, he has strictly been working from home.

J.S. is a **type 2 diabetic** and has recently stopped taking his long-acting insulin. He reports that he's tired of tracking his blood sugars multiple times a day and lost all his insulin in the recent derecho. The cost of the insulin has been difficult to afford because his wife has been out of work and she was the previous carrier of their health insurance. However, they recently were able to get on his employer offered health insurance. When he does check his blood sugars during the day, he reports readings consistently above 200 mg/dL. Last A1c was 1 year ago (7.8%) and fasting labs last completed >1 year ago. No recent microalbumin urine on file in clinic.

As the fall season moves in, J.S. is working outdoors more to prepare their garden and yard for winter. He has been experiencing **allergy symptoms** including increased sneezing, itchiness of his eyes and runny nose. He denies sick contacts in his home and states that his children have been doing remote learning, so it is unlikely that they have "picked anything up" and brought it home. There is no known COVID-19 exposure.

Review of Systems:

General: Denies fevers, chills, or night sweats.
HEENT: Reports watering and itching eyes, runny nose and sneezing. Denies sore throat or difficulty swallowing. Denies ear pain, decreased hearing, or phonophobia associated with the headaches. Reports photophobia associated with headaches and exacerbated by computer screen.
Neck: Denies swelling of lymph nodes in neck.
Cardiac: Denies chest discomfort or pain at rest or when exerting self-doing yard work. Denies swelling in lower extremities.
Respiratory: Denies cough, shortness of breath.
GI: Reports good appetite. Denies abdominal pain, nausea, vomiting or diarrhea.
GU: Denies pain with urination, dark urine color, malodorous urine, or urinary frequency.
Musculoskeletal: Denies changes to strength.
Neuro: Reports frequent headaches occurring 2 days per week. Denies dizziness or weakness. Denies numbness or tingling in feet.
Endocrine: Denies polydipsia, polyuria or polyphagia. Denies changes to hair, skin, or nails.
Integumentary: Denies rash, lesions on the feet.
Psychiatric: Reports decreased mood associated with pandemic. Denies SI/HI.

Physical Exam:

Vitals: BP: 120/80; HR: 88; RR:18; Temp: 37° C, Weight 250 pounds, Height 5' 10", BMI 35.9
General: Well appearing, well nourished, no acute distress
HEENT: Normocephalic, atraumatic. EOMI. Sclera non-icteric. PERRLA. Mucous membranes moist. No erythema of posterior oropharynx. Nares patent, turbinates with boggy pallor, clear nasal drainage. TMs pearly gray and intact. Cone of light present. No effusion. External canal clear of cerumen or debris. Uvula midline, soft palate rises symmetrically, tongue protrudes midline.
Neck: Supple without adenopathy.
Cardiac: RRR, no gallop, murmur or rub auscultated. Capillary refill brisk.
Respiratory: LCTAB, no crackles, wheezes, or rhonchi auscultated anteriorly or posteriorly.
GI: Abdomen soft, non-tender, bowel sounds active in all four quadrants.
GU: Deferred.
Musculoskeletal: MAE, strength 5/5 in upper and lower extremities. Appropriate muscle bulk and tone. Normal gait and stance.
Neuro: Speech clear. Facial features symmetrical, hearing grossly intact. Shoulders shrug against resistance with good strength. Finger to nose intact. CN 2-12 grossly intact. Sensation grossly intact. Peripheral vision grossly intact. Grips strong and equal bilaterally, push/pulls and dorsiflexion/plantar flexion strong and equal bilaterally.
Endocrine: Thyroid without nodules or enlargement.
Integumentary: Skin warm and dry without excessive moisture.
Diabetic foot exam: Skin is dry and intact on bilateral feet. 10g Monofilament wire used to assess sensation on bilateral feet. Patient able to identify sensation in all 8 points. No lesions or cracks noted. Nails are intact without discoloration. DP and PT pulses 2+ bilaterally. Capillary refill brisk in the feet.
Psychiatric: Mood pleasant, appropriate. Affect congruent with situation.

Assessment:
Allergic Rhinitis (J30.9)
Diabetes Mellitus Type 2 with hyperglycemia (E11.65)
Long-term (current) use of insulin (Z79.4)
Migraine headache (G43.909)

Plan:
Allergic Rhinitis: Begin use of fluticasone nasal spray, 2 sprays in each nare once daily for a minimum of 2 weeks. Patient educated that it takes about 1 week for nasal steroids to begin working. Discussed that it may be beneficial to continue through the current harvest as this can cause worsening symptoms in our region. Recommended use of over the counter antihistamine like cetirizine or loratadine 10 mg by mouth once daily. Discussed side effects of 1st generation antihistamine like diphenhydramine and longer lasting effects with less side effects of 2nd generation antihistamine. Follow up if fevers, chills, increased congestion, facial pain, or other acute changes occur.

Diabetes: Now that patient has re-established health insurance coverage, he will resume insulin glargine 10 units (previous dose 20 units) once daily at HS. If insulin glargine is not covered well, we will identify best long acting insulin based on insurance coverage. A1c included in lab profile today to determine average glucose levels. Discussed that A1c goal at patient's age is to have A1c <7.0%. If A1c is >7.0%, would recommend slow titration up of insulin glargine 2 units

every 3-4 days until fasting blood glucose levels are below 140. Do not exceed 20 units of insulin glargine before next appointment.

Continue taking oral antihyperglycemics including metformin 1000 mg BID. Discussed recommendations for management of hypoglycemic episodes. Patient should try to maintain blood glucose levels above 100 mg/dL as he may become symptomatic below that. Follow up in 2 weeks and bring blood sugar log with so that readings can be evaluated. Check blood sugars twice daily, once fasting in the morning and then again 60-90 minutes after one meal per day. Consider adding other oral antihyperglycemics or mealtime insulin if hyperglycemia persists and A1c shows poor control. Discussed concerns for ongoing end organ damage associated with poorly controlled diabetes and obesity as evidence by BMI, especially considering patient's age.

Patient is not currently on cholesterol lowering medications, but this would be beneficial for cardiovascular prevention. Will plan to initiate statin therapy after labs are received. Patient will likely need encouragement and slow progression of treatment after noting during the history taking that he is struggling with his current healthcare regimen. I think starting an additional medication at today's visit may be overwhelming and serve as a deterrent.
Labs ordered include A1c, CBC, and BMP, microalbumin urine, and lipids for uncontrolled T2DM.

Migraine Headaches: Begin sumatriptan 50 mg PO x 1 dose and repeat a 2nd dose 2 hours later, if headache persists. Max of 2 doses in 24 hours. Discussed side effects of sumatriptan including sensory changes, drowsiness, and fatigue. He should be prepared to lay down, if needed, after taking it. It is important to take the sumatriptan at first sign of headache. It will otherwise be less effective once the headache has ramped up.

Discussed that recurrent use of ibuprofen for headaches can lead to rebound headaches and this can be problematic. Patient is not currently experiencing nausea with headaches but if he does, an antiemetic can be considered. Recommend keeping a headache diary to track and look for triggering factors. Patient may also consider tracking dietary intake to help identify food sources as a trigger. We may notice a decrease in headache frequency if we can get sugars under control; it would not be surprising if headaches are, in part, triggered by recurrent episodes of hyperglycemia. Metformin carries a side effect of headaches but J.S. has been stable on this for quite some time so I have less clinical suspicion for this being a factor. Will continue to consider it, as needed.

Recommend avoiding working late into the night or having prolonged periods of staring at the computer screen. Patient advised to take frequent breaks, as able, and to limit screen use shortly before he tries to go to bed.

No neurologic deficits included at this time so no indication for imaging. However, if headaches persist, can consider further imaging and referral to neurology. If patient has acute changes, neurologic deficits, severe headache not relieved by typical measures or sumatriptan, or other acute concerns occur, he should seek care in an ER immediately.

Patient verbalizes understanding and is agreeable with this plan. Follow up 2 weeks for recheck of problems addressed during this visit, sooner if needed.