1. Are your eyes sensitive to light? \_ 1. Yes \_ 0. No

2. Do you get headaches? \_ 1. Yes \_ 0. No

*If no (get headaches)…*

3. Have you ever had a headache? \_ 1. Yes \_ 0. No

*If no (ever had headache)…*

4. Have you ever had episodes of discomfort, pressure,   
or pain around your eyes or face? \_ 1. Yes \_ 0. No

*If yes (2. get headaches) OR yes (3. ever had a headache) or yes (4. discomfort around eyes) …*

5. Do you get headaches or eye/face discomfort that are NOT caused by a   
head injury, hangover, or illness like the cold or flu? \_ 1. Yes \_ 0. No

*If yes to question 5…*

6. Do your headaches ever last more than 4 hours? \_ 1. Yes \_ 0. No

*If yes (headaches last more than 4 hours)…*

7. Do headaches/discomfort that last more than four hours have any of the following?

*Please check all that apply*

\_ 7a. The pain is worse on one side

\_ 7b. The pain is pounding, pulsating, or throbbing

\_ 7c. The pain is moderate or severe in intensity

\_ 7d. The pain is made worse by routine activities such as walking or climbing stairs

\_ 7e. None of the above

8. During headaches/discomfort that last longer than four hours, do you ever experience the following symptoms?

*Please mark all that apply*

\_ 8a. Nausea and/or vomiting

\_ 8b. Sensitivity to light

\_ 8c. Sensitivity to sound

\_ 8d. None of the above

9. Have you had this headache 5 or more times in your life? \_ 1. Yes \_ 0. No

10. When was the last time you had one of these headaches? *Mark ONE.*

\_ 1. Within the past week

\_ 2. Within the past month

\_ 3. Within the past year

\_ 4. Within the past 5 years

\_ 5. More than 5 years ago

*If no (headaches do not last more than 4 hours)…*

11. For your WORST type of headache/discomfort, do any of the following statements describe your plain and symptoms?

*Please mark all that apply*

\_ 11a. The pain is worse on one side

\_ 11b. The pain is pounding, pulsating, or throbbing

\_ 11c. The pain is moderate or severe in intensity

\_ 11d. The pain is made worse by routine activities such as walking or climbing stairs

\_ 11e. None of the above

12. During your WORST type of headache/discomfort, do you ever experience the following symptoms?

*Please mark all that apply*

\_ 1. Nausea and/or vomiting

\_ 2. Sensitivity to light

\_ 3. Sensitivity to sound

\_ 4. None of the above

13. Have you had this type of headache/discomfort 5 or more times in your life?

\_ 1. Yes \_ 0. No

14. When was the last time you had this type of headache/discomfort? *Mark ONE.*

\_ 1. Within the past week

\_ 2. Within the past month

\_ 3. Within the past year

\_ 4. Within the past 5 years

\_ 5. More than 5 years ago

**Aura Symptoms**

*Vision changes question*

15. Around the time of your headache/discomfort, have you ever seen any of the following? (*Check all that apply*)

\_ 15a. Spots

\_ 15b. Stars

\_ 15c. Lines

\_ 15d. Flashing lights

\_ 15e. Zigzag lines

\_ 15f. Heat waves

\_ 15g. Vision loss

\_ 15h. None of the above

*Sensory changes question (numbness/tingling)*

16. Have you ever had any of the following happen around the time of your headache/discomfort? (check all that apply)

\_ 16a. Numbness of your body or face

\_ 16b. Tingling of your body or face

\_ 16c. None of the above

*Difficulty speaking question*

17. Have you ever had any of the following happen around the time of your headache/discomfort? (check all that apply)

\_ 17a. Trouble saying words correctly

\_ 17b. Slurred speech

\_ 17c. Unable to speak

\_ 17d. None of the above

*If two or more of the aura symptoms are selected (vision, numbness/tingling, difficulty speaking)…*

18. Do changes in vision, numbness/tingling, and or difficulty speaking happen at the same time?

\_ 1. Yes

\_ 0. No, one happens first and then another happens later

*Vision Changes*

*If yes to any Vision changes question in the Aura Symptoms (question 15 anything other than “none of the above” is marked)…*

19. Have you had these vision changes with your headache/discomfort   
two or more times in your life? \_ 1. Yes \_ 0. No

20. When do you have these vision changes? *Please mark all that apply*

\_ 20a. Before the headache/discomfort

\_ 20b. During the headache/discomfort

\_ 20c. After the headache/discomfort

21. When was the last time you had these vision changes? *Choose one*

\_ 1. Within the past week

\_ 2. Within the past month

\_ 3. Within the past year

\_ 4. Within the past 5 years

\_ 5. More than 5 years ago

22. How long do these vision changes usually last? *Choose one*

\_ 1. Less than 5 minutes

\_ 2. 5 minutes to 1 hour

\_ 3. More than 1 hour

*If response is less than 5 minutes OR response is more than 1 hour…*

22a. Do these changes ever last 5 – 60 minutes \_ 1. Yes \_ 0. No

23. Are the vision changes only on one side?

\_ 1. Yes

\_ 0. No, both sides at the same time

24. Do the vision changes spread or move across your vision?

\_ 1. Yes

\_ 0. No, it starts and stays the same

*Sensory Changes*

*If yes to any Sensory changes question in the Aura Symptoms (question 16 response is not “none of the above”)*

25. Have you had this numbness and/or tingling with your headache/discomfort   
two or more times in your life? \_ 1. Yes \_ 0. No

26. When do you have this numbness and/or tingling? *Please mark all that apply*

\_ 26a. Before the headache/discomfort

\_ 26b. During the headache/discomfort

\_ 26c. After the headache/discomfort

27. When was the last time you had this numbness and/or tingling? *Choose one*

\_ 1. Within the past week

\_ 2. Within the past month

\_ 3. Within the past year

\_ 4. Within the past 5 years

\_ 5. More than 5 years ago

28. How long does the numbness and/or tingling usually last? *Choose one*

\_ 1. Less than 5 minutes

\_ 2. 5 minutes to 1 hour

\_ 3. More than 1 hour

*28a. If response is less than 5 minutes OR response is more than 1 hour…*

Do these changes ever last 5 – 60 minutes \_ 1. Yes \_ 0. No

29. Is the numbness and/or tingling only on one side of your body?

\_ 1. Yes

\_ 0. No, it is both sides at the same time

30. Does the numbness and/or tingling start in one spot, and then spread or move?

\_ 1. Yes

\_ 0. No, it starts and stays in the same place

*Difficulty Speaking*

*If yes to any Difficulty Speaking question in the Aura Symptoms (question 17 response is not “none of the above”)*

31. Have you had difficulty speaking with your headache/discomfort   
two or more times in your life? \_ 1. Yes \_ 0. No

32. When do you have difficulty speaking? *Please mark all that apply*

\_ 32a. Before the headache/discomfort

\_ 32b. During the headache/discomfort

\_ 32c. After the headache/discomfort

33. When was the last time you had difficulty speaking? *Choose one*

\_ 1. Within the past week

\_ 2. Within the past month

\_ 3. Within the past year

\_ 4. Within the past 5 years

\_ 5. More than 5 years ago

34. How long does the difficulty speaking usually last? *Choose one*

\_ 1. Less than 5 minutes

\_ 2. 5 minutes to 1 hour

\_ 3. More than 1 hour

*If response is less than 5 minutes OR response is more than 1 hour…*

Do these changes ever last 5 – 60 minutes \_ 1. Yes \_ 0. No

*(This is the end of the aura symptoms section)*

*Ask of all participants*

35. Did you get motion sick (e.g., car sick) when you were a child?

\_ 1. Yes

\_ 0. No

*Ask of all participants*

36. Did your parents, children, brothers, or sisters get migraines?

\_ 1. Yes

\_ 2. No

\_ 3. I don’t know

**Choi Photophobia Questions**

*Ask if yes to question 4…*

37. During your headache, do you feel a greater sense of glare or dazzle   
in your eyes than usual by bright light? \_ 1. Yes \_ 0. No

38. During your headache, do flickering lights, glare, specific colors or   
high contrast striped patterns bother you or your eyes? \_ 1. Yes \_ 0. No

39. During your headache, do you turn off the lights or draw a curtain   
to avoid bright conditions? \_ 1. Yes \_ 0. No

40. During your headache, do you have to wear sunglasses even in normal daylight? \_ 1. Yes \_ 0. No

41. During your headache, do you have to wear sunglasses even in normal daylight? \_ 1. Yes \_ 0. No

42. Is your headache worsened by bright lights? \_ 1. Yes \_ 0. No

43. Is your headache triggered by bright lights? \_ 1. Yes \_ 0. No

44. Do you have any of the above symptoms even during your headache-free interval? \_ 1. Yes \_ 0. No

**Closing Questions** *(ask of all participants)*

45. Are your answers sincere? Are they correct?

\_ 1. Yes, my answers are correct

\_ 2. No, I made a mistake and would like to retake the survey

\_ 3. No, don’t use my answers, they were not sincere

46. May we contact you about future projects in headache research? \_ 1. Yes \_ 0. No

*Refrain from providing participants the following information:*

Reference:

Kaiser, E.A., Igdalova A., Aguirre G.K., Cucchiara, B. (2019) A web-based, branching logic questionnaire for the automated classification of migraine. *Cephalalgia. 39*(10):1257-1266. doi: 10.1177/0333102419847749.

Scoring:

Table S1. Migraine without aura

|  |  |
| --- | --- |
| **Question** | **Inclusion responses** |
| 1. Do you get headaches? | Yes |
| 2. Do you get headaches that are NOT caused by a head injury, hangover, or an illness such as the cold or the flu? | Yes |
| 3. Do your headaches ever last more than 4 hours? | Yes |
| 4. Have you had this headache 5 or more times in your life? | Yes |
| 5. Do any of the following statements describing your pain and other symptoms apply to your headaches that are longer than 4 hours? Please mark all that apply. | * The pain is worse on one side * The pain is pounding, pulsating, or throbbing * The pain is moderate or severe in intensity * The pain is made worse by routine activities such as walking or climbing stairs |
| 6. During your headaches that are longer than 4 hours, do you ever experience the following symptoms? Please mark all that apply. | * Nausea and/or vomiting * Sensitivity to light * Sensitivity to sound |

For migraine without aura, subjects need select at least 2 of 4 responses for question 5, and select 1 of 3 responses for question 6 in order to meet criteria.

Table S2. Migraine with visual aura

|  |  |
| --- | --- |
| **Question** | **Inclusion responses** |
| 1. Do you get headaches? | Yes |
| 2. Do you get headaches that are NOT caused by a head injury, hangover, or an illness such as the cold or the flu? | Yes |
| 3. Have you ever seen any spots, stars, lines, flashing lights, zigzag lines, or heat waves around the time of your headaches? | Yes |
| 4. Have you experienced these visual phenomena with your headaches two or more times in your life? | Yes |
| 5. How long do these visual phenomena typically last? | 5 min to 1 hour |
| 6. When do you see these visual phenomena in relation to your headache? Please mark all that apply. | Before the headache |

For migraine with visual aura, subjects need to answer questions as stated.

|  |  |
| --- | --- |
| **Question** | **Inclusion responses** |
| 1. Do you get headaches? | Yes |
| 2. Do you get headaches that are NOT caused by a head injury, hangover, or an illness such as the cold or the flu? | Yes |
| 3. Around the time of your headaches, have you ever had: | * Numbness or tingling of your body or face * Weakness of your arm, leg, face, or half of your body * Difficulty speaking |
| 4. Have you experienced these phenomena with your headaches two or more times in your life? | Yes |
| 5. How long do these phenomena typically last? | * 5 min to 1 hour * More than 1 hour |
| 6. When do you experience these phenomena in relation to your headache? Please mark all that apply. | Before the headache |

Table S3. Migraine with other aura

For migraine with other aura where individuals reported non-visual aura symptoms, subjects need to select at least 1 of 3 responses for question 3. Also, subject need to select either of the two responses listed for question 5, which is based on ICHD-3 (beta) criteria that state “each individual aura symptoms may last 5-60 min”; thus, subjects may have multiple aura symptoms that may in combination last longer than 60 min.

Table S4. Headache Free

|  |  |
| --- | --- |
| **Question** | **Inclusion responses** |
| 1. Do you get headaches? | A. No; B. No; C. Yes |
| 2. Do you get headaches that are NOT caused by a head injury, hangover, or an illness such as the cold or the flu? | A. N/A; B. N/A; C. No |
| 3. Have you ever had a headache? | A. No; B. Yes; C. N/A |
| 4. Have you ever had a headache that was NOT caused by a head injury, hangover, or an illness such as the cold or the flu? | A. N/A; B. No; C. N/A |
| 5. Have you ever had episodes of discomfort, pressure, or pain around your eyes or sinuses? | A. No; B. No; C. No |

For headache free, subjects can meet criteria based on three potential pathways (A, B, or C) within the branching logic structure**.** Not applicable (N/A) questions were not in that specific pathway, thus, would not have been answered.

Table S5. Mild Non-Migrainous Headache

|  |  |
| --- | --- |
| **Question** | **Exclusion responses** |
| 1. Do your headaches ever last more than 4 hours? | Yes |
| 2. Have you ever seen any spots, stars, lines, flashing lights, zigzag lines, or heat waves around the time of your headaches? | Yes |
| 3. Around the time of your headaches, have you ever had: | * Numbness or tingling of your body or face * Weakness of your arm, leg, face, or half of your body * Difficulty speaking |
| 4. How would you describe this pain or discomfort? | * Throbbing pain * Stabbing pain |
| 5. How intense would you rate this pain or discomfort | * Moderate * Severe |
| 6. During these episodes, do you ever experience the following symptoms? Please mark all that apply. | * Nausea and/or vomiting * Sensitivity to light * Sensitivity to sound |
| 7. Do you usually get headaches around your menstrual periods? | – Yes |
| 8. For your MOST SEVERE type of headache, do any of the following statements describe your pain and symptoms? Please mark all that apply. | * The pain is pounding, pulsating, or throbbing * The pain is moderate or severe in intensity * The pain is made worse by routine activities such as walking or climbing stairs |
| 9. During your MOST SEVERE headaches, do you ever experience the following symptoms? Please mark all that apply | * Nausea and/or vomiting * Sensitivity to light * Sensitivity to sound |
| 10. How would you describe your MOST SEVERE headaches? | * Throbbing pain * Stabbing pain |

To meet criteria for mild non-migrainous headache, subjects cannot select any of the responses listed above. Note that some questions and responses are slightly redundant due to the branching logic structure of the survey