**Chart Abstraction Questionnaire for the Investigation of Guillain-Barré Syndrome in Relation to Arboviral Infections**

Study ID Number BR- \_\_\_\_ \_\_\_\_ - \_\_\_\_ □ Case □ Control

*The ID number begins with the 2 digit case number (for example BR01) followed by an “A” for the case patient, a “B” for the first control, a “C” for the second control, and a”D” for the third control. For example, the second control subject matched for case number 8 would be labeled “BR-08-C.”*

***The following pages are to be abstracted from the medical records / exam for cases and applicable controls:***

Chart Abstractor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Abstraction Date: \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 DD MM YYYY

1. a. For both, in the 2 months prior to \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_ (neuro onset date for case), did the individual seek care at a doctor/hospital at all with an acute illness (for cases, other than their neuro illness)? □ Yes □No □ Unknown

b. If so, when did they report first feeling sick? \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_

c. If so, what symptoms did they report having or what signs were noticed (check all that apply)?

 □ Fevers □ Chills □ Nausea or Vomiting □ Diarrhea □ Muscle pains □ Joint pains □ Skin rash □ Abnormally red eyes

 □ Headache □ Pain behind eyes □ Stiff neck □ Confusion

 □ Abdominal pain □ Coughing □ Runny nose □ Sore throat □ Calf pain

 d. If any blood was taken for this acute illness, please fill out the following for the INITIAL blood draw :

 Date \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_ WBC \_\_\_\_ HgB\_\_\_\_ Plts \_\_\_\_\_ Na \_\_\_\_ K\_\_\_\_

 BUN \_\_\_\_ Cr \_\_\_\_\_\_ Glucose\_\_\_\_ TBili\_\_\_\_ AST \_\_\_\_ ALT\_\_\_\_ AlkPhos \_\_\_

 e. If so, were they hospitalized for this acute illness? □ Yes □ No □ Unknown

 f. If so, did they receive any blood products / IVIG for this illness? □ Yes □ No □ Unknown

 What product? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date? \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 g. If so, did they receive plasmapheresis / plasma exchange for this illness? □ Yes □ No □ Unknown

 If yes, date? \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

2. a. For both, was this patient tested for dengue at the time of acute illness? □ Yes □ No □ Unknown

 b. If so, what was the date of the specimen collection? \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 c. If so, which specimen(s) was/were collected: □ Serum □Blood □CSF

*(If >1 specimen collected on individual, write in margin type of specimen, date collected, and result.)*

 d. If so, check the test(s) done and circle result (check all that apply)?

 □ PCR Pos Neg Unknown

 □ NS1 Pos Neg Unknown

 □ IgM Pos Neg Unknown

 □ IgG Pos Neg Unknown

3. a. For both, was this patient tested for chikungunya at the time of acute illness?

 □ Yes □ No □ Unknown

 b. If so, what was the date of the specimen collection? \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 c. If so, which specimen was collected □ Serum □Blood □CSF

 *(If >1 specimen collected on individual, write in margin type of specimen, date collected, and result.)*

 d. If so, check the test(s) done and circle result (check all that apply)?

 □ PCR Pos Neg Unknown

 □ IgM Pos Neg Unknown

 □ IgG Pos Neg Unknown

4. a. For both, was this patient tested for Zika virus at the time of acute illness?

 □ Yes □ No □ Unknown

 b. If so, what was the date of the specimen collection? \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 c. If so, which specimen was collected: □ Serum □ Blood □ CSF □ Urine

 *(If >1 specimen collected on individual, write in margin type of specimen, date collected, and result.)*

 d. If so, check the test(s) done and circle result (check all that apply)?

 □ PCR Pos Neg Unknown

 □ IgM Pos Neg Unknown

 □ IgG Pos Neg Unknown

5. a. For both, was this patient tested for leptospirosis at the time of acute illness? □ Yes □ No □ Unknown

 b. If so, what was the date of the specimen collection? \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 c. If so, which specimen was collected □ Serum □ Blood □ CSF

 *(If >1 specimen collected on individual, write in margin type of specimen, date collected, and result.)*

 d. If so, which test? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 e. If so, what was the result? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. For both, are there any already available leftover specimens related to the above acute illness?

 a. Serum □ Yes □ No Collection Date \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 b. Whole Blood □ Yes □ No Collection Date \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 c. CSF □ Yes □ No Collection Date \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 d. Urine □ Yes □ No Collection Date \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

7. For cases, what was the date of neuro onset for the case? (neuro symptoms, not preceding acute febrile illness or diarrhea)

\_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_

8. For cases, what neurologic symptoms occurred on the DAY OF ONSET (check all that apply)?

 □ Leg weakness □ Arm weakness □ Face weakness □ Diplopia/Opthalmoplegia

 □ Leg numbness/parasthesias □ Arm numbness/parasthesias □ Face numbness/parasthesias

 □ SOB / respiratory distress □ Gait imbalance (not weakness) □ Hand clumsiness (not weakness)

9. For cases, what neurologic symptoms occurred AT ANY TIME during the neuro illness (check all that apply)?

 □ Leg weakness □ Arm weakness □ Face weakness □ Diplopia/Ophthalmoplegia

 □ Leg numbness/parasthesias □ Arm numbness/parasthesias □ Face numbness/parasthesias

 □ SOB / respiratory distress □ Gait imbalance (not weakness) □ Hand clumsiness (not weakness)

10. For cases, how long from onset until maximum/worst neuro symptoms? \_\_\_\_\_\_\_\_\_\_\_\_ minutes/hours/days/weeks

11. For cases, at their worst during this neuro illness, was the patient (check all that apply)?

 □ Unable to walk without assistance (e.g. cane, walker) □ Unable to walk at all

 □ Admitted to the hospital □ Admitted to the ICU/CCU □ Intubated

12. Hughes Disability Score at time of evaluation: (Date recorded \_\_\_/\_\_\_\_\_/ \_\_\_\_\_\_\_\_\_)

 Hughes Disability Score: : F-score (0 to 6) Unknown

*[0 = Complete recovery; no sequelae, 1 = Minor symptoms and capable of running, 2 = Able to walk 10 metres or more without assistance but unable to run, 3 = Able to walk 10 metres with help, 4 = Bedridden or chairbound (unable to walk 10 meters with help), 5 = Requiring assisted ventilation for at least part of the day, 6 = Dead]*

13. If any blood was taken for this neurologic illness, please fill out the following for the INITIAL blood draw :

 Date \_\_ \_\_ /\_\_ \_\_ /2015 WBC \_\_\_\_ HgB\_\_\_\_ Plts \_\_\_\_\_ Na \_\_\_\_ K\_\_\_\_

 BUN \_\_\_\_ Cr \_\_\_\_\_\_ Glucose\_\_\_\_ TBili\_\_\_\_ AST \_\_\_\_ ALT\_\_\_\_ AlkPhos \_\_\_

14. For cases, was a lumbar puncture (LP) done? □ Yes □ No □ Unknown

 LP date \_\_\_/\_\_\_\_/\_\_\_\_ RBCS \_\_\_\_\_\_\_ WBCS \_\_\_\_\_\_ Protein (mg/dL)\_\_\_\_\_\_ Glucose (mg/dL) \_\_\_\_\_\_\_

 LP date \_\_\_/\_\_\_\_/\_\_\_\_ RBCS \_\_\_\_\_\_\_ WBCS \_\_\_\_\_\_ Protein (mg/dL)\_\_\_\_\_\_ Glucose (mg/dL) \_\_\_\_\_\_\_

15. For cases, was there documented hyporeflexia/areflexia in the chart or by neurologists? □ Yes □ No □ Unknown

16. For cases, were any upper motor neuron signs found in the chart or by neurologists? □ Yes □ No □ Unknown

 If yes, specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17. For cases, are there any already available leftover specimens related to the above neuro illness?

 a. Serum □ Yes □ No Collection Date \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 b. Whole Blood □ Yes □ No Collection Date \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 c. CSF □ Yes □ No Collection Date \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

 d. Urine □ Yes □ No Collection Date \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

18. For cases, did they receive any blood products / IVIG for this neuro illness? □ Yes □ No □ Unknown

 What product? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date? \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

19. For cases, were any of the following diseases tested for? If so, what was the result (including specimen and type of test)?

 a. *Campylobacter jejuni* □ Yes □ No Result:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 b. *Mycoplasma pneumoniae* □ Yes □ No Result:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 c. *Haemophilus influenza* □ Yes □ No Result:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 d. *Salmonella* species □ Yes □ No Result:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 e. Cytomegalovirus (CMV) □ Yes □ No Result:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 f. Epstein-Barr virus (EBV) □ Yes □ No Result:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 g. Varicella-zoster virus (VZV) □ Yes □ No Result:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 h. Human immunodeficiency virus (HIV) □ Yes □ No Result:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 i. Enterovirus / Rhinovirus □ Yes □ No Result:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

20. For cases, was neuro imaging done? If so, what was the result?

 □ Yes □ No Result:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

21. For cases, were electro-diagnostics done (e.g. EMG)? If so, what were the results?

 □ Yes □ No Result:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_ \_\_ /\_\_ \_\_ /\_\_\_\_\_\_\_\_

22. For cases, what was the GBS Brighton level? 1 2 3 4 5

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| --- |
|  |
|  |
| Levels of Diagnostic Certainty

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Level 1***  | ***Level 2*** | ***Level 3*** | ***Level 4\**** | ***Level 5*** |
| Absence of an alternative diagnosis for weakness | NOT a case |
| Acute onset of bilateral and relatively symmetric flaccid weakness of the limbs | \* Lacking documentation to fulfill minimal case criteria |
| Decreased or absent deep tendon reflexes in affected limbs |
| Monophasic illness pattern with weakness nadir between 12 hours and 28 days, followed by clinical plateau |
| Albuminocytologic dissociation (elevation of CSF protein level above laboratory normal value and CSF total white cell count < 50 cells/mm3) | CSF with a total white cell count < 50 cells/mm3 (with or without CSF protein elevation above laboratory normal value) or if CSF not collected or results not available, and electrodiagnostic studies consistent with GBS |  |
| Electrophysiologic findings consistent with GBS |  |  |

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