

## **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)?

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> Fevers         | <input type="checkbox"/> Chills           | <input type="checkbox"/> Nausea or Vomiting | <input type="checkbox"/> Diarrhea                                       |
| <input type="checkbox"/> Muscle pains   | <input type="checkbox"/> Joint pains      | <input type="checkbox"/> Skin rash          | <input type="checkbox"/> Abnormally red eyes                            |
| <input type="checkbox"/> Headache       | <input type="checkbox"/> Pain behind eyes | <input type="checkbox"/> Stiff neck         | <input type="checkbox"/> Confusion                                      |
| <input type="checkbox"/> Abdominal pain | <input type="checkbox"/> Coughing         | <input type="checkbox"/> Runny nose         | <input type="checkbox"/> Sore throat <input type="checkbox"/> 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)?

- |                              |     |     |         |
|------------------------------|-----|-----|---------|
| <input type="checkbox"/> PCR | Pos | Neg | Unknown |
| <input type="checkbox"/> NS1 | Pos | Neg | Unknown |
| <input type="checkbox"/> IgM | Pos | Neg | Unknown |
| <input type="checkbox"/> 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/Ophthalmoplegia  
 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

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/mm <sup>3</sup> )	CSF with a total white cell count < 50 cells/mm <sup>3</sup> (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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