

## SUPPLEMENTARY MATERIAL 1

### Survey

1. City where you work (CABA or province)
2. Position
3. Type of facility
  - a. Public
  - b. Private
4. Is there a neurocritical care unit?
  - a. Yes
  - b. No

### Questions about examiner/training

5. Who performs TCD ultrasounds in your department?
  - a. Staff pediatric intensivist
  - b. Resident pediatric intensivist
  - c. Imaging specialist
  - d. Neurologist
  - e. Other (please, indicate)
6. Who interprets tests?
  - a. The same operator
  - b. The physician seeing the patient
  - c. The team seeing the patient
7. What was the operator's training in TCD?
  - a. University course
  - b. SATI course
  - c. Practice in adult intensive care unit
  - d. Practice in pediatric services
  - e. Other
8. Are you satisfied with training in the pediatric area?
  - a. Very satisfied
  - b. Satisfied
  - c. Little satisfied
  - d. Unsatisfied
  - e. Other
9. Have you received additional training in pediatric neurocritical care?
  - a. Yes
  - b. No
10. Pediatric neurocritical care took place:
  - a. During your residency program
  - b. Neurocritical care course from the SATI
  - c. Rotations in national services that care for neurocritical patients
  - d. International rotations
  - e. Other

### Questions about TCD ultrasound

11. Is there a protocol for test indication at your facility? (Please, indicate in which pathologies)
  - a. Yes
  - b. No
  - c. I do not know
  
12. Is there a protocol for test standards at your facility? (Technique, depth, sample volume, power, gain, velocities)
  - a. Yes
  - b. No
  - c. I do not know
  
13. Is the TCD report part of the patient's medical record?
  - a. Yes
  - b. No
  - c. I do not know

### Questions about clinical practice and research

14. What territories are scanned during the test?
  - a. Only middle cerebral arteries (MCA)
  - b. Only anterior territory
  - c. Anterior and posterior territories
  
15. For which situations/conditions is TCD ultrasound monitoring indicated?
  - a. Ischemic or hemorrhagic stroke
  - b. Severe traumatic head injury
  - c. Moderate traumatic head injury
  - d. Hypoxic ischemic encephalopathy
  - e. Cardiovascular surgery monitoring
  - f. Cardiovascular surgery postoperative period
  - g. ECMO
  - h. Suspected brain death
  - i. Hepatic encephalopathy
  - j. Meningitis
  - k. Hydrocephalus
  - l. Diabetic ketoacidosis
  - m. Other (please, indicate.)
  
16. Do you use TCD ultrasound to decide on management or guide treatments?
  - a. Yes
  - b. No
  
17. Do you carry out any of these changes based on test findings?
  - a. Increase or reduce mean blood pressure with fluids or vasopressors
  - b. Increase or reduce PCO<sub>2</sub> via ventilator manipulation
  - c. Increase Hct level
  - d. Reduce fever
  - e. Hypothermia
  - f. Request CT scan
  - g. Request neurosurgical assessment for intracranial pressure monitor insertion
  - h. Request neurosurgical assessment for surgery
  - i. Start brain death assessment

18. Do you measure cerebral self-regulation?

- a. Yes
- b. No
- c. I do not know

19. Which technique do you use to measure cerebral self-regulation?

- a. Transient hyperemic response test
- b. Drug-induced hypertension monitoring

20. Do you offer long-term follow-up for neurocritical patients who undergo TCD ultrasound and receive treatment based on test results?

- a. Yes
- b. No
- c. I do not know

21. If brain death is suspected, do you diagnose circulatory arrest as an ancillary test for patients older than 2 years as part of the protocol?

- a. Yes
- b. No

22. Who performs a TCD ultrasound as an ancillary test?

- a. Pediatric intensivist
- b. Pediatric neurologist
- c. Other (please, indicate)

23. Do you use TCD ultrasounds for research purposes?

- a. Yes
  - b. No
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## SUPPLEMENTARY MATERIAL 2

### Surveyed participants' opinions about training

Surveyed participant 1	"We should have training courses during graduate school".
Surveyed participant 2	"During my training, there were no exclusive pediatric courses or pediatric rotations yet".
Surveyed participant 3	"It was a fantastic course; however, it would be good to develop pediatric-specific activities".
Surveyed participant 4	"It would be good to have courses more focused in pediatrics and intensive care duties".
Surveyed participant 5	"There is little bibliography and few courses on this topic. Not all pediatric intensive care residency programs offer training on this topic".
Surveyed participant 6	"My practice with the SATI was on adult patients".
Surveyed participant 7	"Poor pediatric training".
Surveyed participant 8	"I would need additional practice".
Surveyed participant 9	"We have an imaging specialist available 24/7, so training in TCD ultrasound was ancillary and irregular".
Surveyed participant 10	"It is not something that is done routinely or frequently; there is not enough experience".

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TCD: Transcranial Doppler ultrasound; SATI: Sociedad Argentina de Terapia Intensiva.