

Paediatric CNS Vasculitis Brain Biopsy Scoring Tool

Record ID _____

H&E**Leptomeninges**

1. Leptomeningeal Inflammation

- ☐
- Yes
-
- ☐
- No

Comments _____

Cortex

2. Cortical Inflammation

- ☐
- Yes
-
- ☐
- No

3. Inflammation Localization

- ☐
- Angiocentric
-
- ☐
- Parenchymal

4. Vessel Size

- ☐
- Large (smooth muscle)
-
- ☐
- Small (no smooth muscle)

5. Vessel Inflammation Localization

- ☐
- Intramural
-
- ☐
- Perivascular
-
- ☐
- Unsure

6. Severity of Inflammation (grade worst vessel)

- ☐
- Mild (scattered lymphocytes)
-
- ☐
- Moderate (in between mild to severe)
-
- ☐
- Severe (obliterated vessel wall)

7. Gliosis

- ☐
- Yes
-
- ☐
- No

8. Gliosis Subtypes

- ☐
- Astrogliosis
-
- ☐
- Microglial Activation/Microgliosis

Astrogliosis Localization

- ☐
- Perivascular
-
- ☐
- Diffuse

Microglial Activation/Microgliosis Localization

- ☐
- Perivascular
-
- ☐
- Diffuse
-
- ☐
- Microglial Nodules

9. Perineuronal changes

- ☐
- Yes
-
- ☐
- No

10. Reactive Endothelium

- ☐
- Yes
-
- ☐
- No

11. Infarct

- ☐
- Yes
-
- ☐
- No

12. Neuronophagia

- ☐
- Yes
-
- ☐
- No

White Matter

13. White Matter Inflammation ☐ Yes
☐ No
14. White Matter Inflammation Localization ☐ Angiocentric
☐ Parenchymal
15. Vessel Size ☐ Large (smooth muscle)
☐ Small (no smooth muscle)
16. Vessel Localization ☐ Intramural
☐ Perivascular
☐ Unsure
17. Severity of Inflammation ☐ Mild (scattered lymphocytes)
☐ Moderate (in between mild and severe)
☐ Severe (vessel wall obliterated)
18. Gliosis ☐ Yes
☐ No
- Gliosis Subtypes ☐ Astrogliosis
☐ Microglial Activation/Microgliosis
- Astroglisis Localization ☐ Perivascular
☐ Diffuse
- Microglial Activation/Microgliosis ☐ Perivascular
☐ Diffuse
☐ Microglial Nodules
19. Perineuronal changes ☐ Yes
☐ No
20. Myelin Loss ☐ Yes
☐ No
21. Reactive Endothelium ☐ Yes
☐ No
22. Infarct ☐ Yes
☐ No

IMMUNOSTAINING

CD45

23. CD45 ☐ Yes
☐ No
☐ Not Done
- Matter ☐ Cortex
☐ White Matter
- Inflammation Localization ☐ Angiocentric
☐ Parenchymal
- Vessel Size ☐ Large (smooth muscle)
☐ Small (no smooth muscle)

Severity of Inflammation

- ☐ Mild (scattered lymphocytes)
☐ Moderate (between mild and severe)
☐ Severe (vessel wall obliterated)

CD3

24. CD3

- ☐ Yes
☐ No
☐ Not Done

Matter

- ☐ Cortex
☐ White Matter

Inflammation Localization

- ☐ Angiocentric
☐ Parenchymal

Vessel Size

- ☐ Large (smooth muscle)
☐ Small (no smooth muscle)

Severity of Inflammation

- ☐ Mild (scattered lymphocytes)
☐ Moderate (between mild and severe)
☐ Severe (vessel wall obliterated)

CD4

25. CD4

- ☐ Yes
☐ No
☐ Not Done

Inflammation Localization

- ☐ Angiocentric
☐ Parenchymal

Matter

- ☐ Cortex
☐ White Matter

Vessel Size

- ☐ Large (smooth muscle)
☐ Small (no smooth muscle)

Severity of Inflammation

- ☐ Mild (scattered lymphocytes)
☐ Moderate (between mild and severe)
☐ Severe (vessel wall obliterated)

CD8

26. CD8

- ☐ Yes
☐ No
☐ Not Done

Inflammation Localization

- ☐ Angiocentric
☐ Parenchymal

Matter

- ☐ Cortex
☐ White Matter

Vessel Size

- ☐ Large (smooth muscle)
☐ Small (no smooth muscle)

Severity of Inflammation

- ☐ Mild (scattered lymphocytes)
☐ Moderate (between mild and severe)
☐ Severe (vessel wall obliterated)

CD20

27. CD20

- ☐ Yes
☐ No
☐ Not Done

Inflammation Localization

- ☐ Angiocentric
☐ Parenchymal

Matter

- ☐ Cortex
☐ White Matter

Vessel Size

- ☐ Large (smooth muscle)
☐ Small (no smooth muscle)

Severity of Inflammation

- ☐ Mild (scattered lymphocytes)
☐ Moderate (between mild and severe)
☐ Severe (vessel wall obliterated)

CD68

28. CD68

- ☐ Yes
☐ No
☐ Not Done

Inflammation Localization

- ☐ Angiocentric
☐ Parenchymal

Matter

- ☐ Cortex
☐ White Matter

Vessel Size

- ☐ Large (smooth muscle)
☐ Small (no smooth muscle)

Severity of Inflammation

- ☐ Mild (scattered lymphocytes)
☐ Moderate (between mild and severe)
☐ Severe (vessel wall obliterated)