

**SUPPLEMENTARY MATERIAL**

Please complete the survey below.

Thank you!

### SARS-CoV-2 and Pediatric Ischemic Stroke - Survey II

Background: Early in the COVID-19 pandemic, there were concerning reports of young adults presenting with stroke as the first symptom of COVID-19. Additionally, large strokes with worse outcomes were reported among adults with COVID-19. Due to concern among parents and caregivers, we previously surveyed IPSS members and other colleagues within the pediatric stroke community, to answer the following questions about patients from March to May 2020:

- (1) Numbers of new ischemic strokes in first 3 months of the pandemic compared to preceding two months
- (2) Number of ischemic stroke cases that tested positive for SARS-CoV-2
- (3) Patient-level data on those with stroke and SARS-CoV-2
- (4) Numbers of pediatric patients hospitalized with SARS-CoV-2

Findings of this study are in press at Annals of Neurology (Pediatric Ischemic Stroke: An Infrequent Complication of SARS-CoV-2). All sites and co-investigators are listed in a Supplementary Table that can be found in PubMed.

We found that about 0.8% of pediatric patients hospitalized with SARS-CoV-2 had ischemic strokes, and the percentage of incident ischemic strokes with evidence of SARS-CoV-2 infection ranged from 0% (neonatal CSVT) to 3.6% (childhood arterial ischemic stroke). On trend analysis, we did not find an increase in stroke numbers among our 61 centers from January to May 2020, but we acknowledged the importance of continued surveillance given the knowledge that some infections related to stroke, like varicella, can cause strokes weeks to months after infection. Of the 8 ischemic stroke cases, 7 had additional established risk factors for pediatric stroke.

Given that 6 of 8 cases were childhood arterial ischemic stroke, we are now focusing our second survey on childhood arterial ischemic stroke only. This survey requests information from June to December 2020. SickKids has approved an IRB waiver to obtain the numbers requested. If your center has stroke cases positive for SARS-CoV-2, we will invite you to submit a case report form, and we can help your center with IRB/REB approval, if needed. Investigators that submit cases positive for SARS-CoV-2 will be invited to co-author the manuscript. All contributing sites and co-investigators will be listed in the Appendix, as per the IPSS Policy. Cases that have been reported in the literature already can still be submitted. Please just let us know so that we can cite the paper.

We would be grateful for your provision of stroke numbers even if you do not have access to the SARS-CoV-2 hospitalization numbers.

We very much appreciate your support and participation in the survey, and hope that you and your family are well.

### Respondent Information

Name of Hospital:

\_\_\_\_\_

Are you an IPSS Site?

Yes  No

Site Code / DAG:

\_\_\_\_\_

Country:

\_\_\_\_\_

Respondent Name (optional):

\_\_\_\_\_ ( This will help us ensure there is one entry per site. )

Respondent Email (optional):

( Providing your email address will facilitate follow-up correspondence. )

## Childhood AIS (cAIS) Survey Questions

**cAIS defined as 29 days through 18 years**

**JUNE 2020**

How many new acute (incident) cAIS patients were admitted to your hospital in JUNE 2020?

Acute AIS defined as = new onset focal symptoms in last 10 days in arterial distribution with CT or MRI evidence of infarct.

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- Greater than 20

How many acute cAIS patients were tested for SARS-CoV-2?

\_\_\_\_\_

What was your institutional SARS-CoV-2 testing practice(s) in June 2020? Please check all that apply.

- PCR
- Antibody / Serology
- Antigen
- Other
- No Testing Performed/ Not Applicable

Other, Specify:

\_\_\_\_\_

Did any of your acute cAIS patients seen in June 2020 have evidence of SARS-CoV-2 during the time of their stroke presentation (positive PCR; IgM and/or IgG, antigen, or MIS-C/PIMS-TS)?

- Yes    No
- (MIS-C = Multisystem Inflammatory Syndrome of Childhood (associated with SARS-CoV-2/ COVID-19); PIMS-TS = Paediatric Inflammatory Multisystem Syndrome; temporally associated with SARS-CoV-2)

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How many acute cAIS patients tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic from virus) in June 2020?

- 1     2     3     4
- 5     6     7     8
- 9     10     11     12
- 13     14     15     16
- 17     18     19     20
- Greater than 20

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\*We may contact you at a later time to capture the details of this/these case(s).

How many hospitalized pediatric patients (0 to < 18 years, with or without stroke) tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in June 2020?

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Please check "Not able to obtain this information" if you are not able to obtain number above (hospitalized pediatric patients (0 to < 18 years) that tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in June 2020).

NOT able to obtain this information

Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in June 2020, please indicate the number positive by PCR:

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
- 8    9    10    11
- 12    13    14    15
- 16    17    18    19
- 20    21    22    23
- 24    25    26    27
- 28    29    30    31
- 32    33    34    35
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- 40    41    42    43
- 44    45    46    47
- 48    49    50    51
- 52    53    54    55
- 56    57    58    59
- 60    61    62    63
- 64    65    66    67
- 68    69    70    71
- 72    73    74    75
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- 172    173    174
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Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in June 2020, please indicate the number positive by Serology/Antibody (IgM and/or IgG):

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
- 8    9    10    11
- 12    13    14    15
- 16    17    18    19
- 20    21    22    23
- 24    25    26    27
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- 64    65    66    67
- 68    69    70    71
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- 96    97    98    99
- 100    101    102
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**JULY 2020**

How many new acute (incident) cAIS patients were admitted to your hospital in JULY 2020?

Acute AIS defined as = new onset focal symptoms in last 10 days in arterial distribution with CT or MRI evidence of infarct.

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 Greater than 20

How many acute cAIS patients were tested for SARS-CoV-2?

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What was your institutional SARS-CoV-2 testing practice(s) in July 2020? Please check all that apply.

- PCR  
 Antibody / Serology  
 Antigen  
 Other  
 No Testing Performed/ Not Applicable

Other, Specify:

\_\_\_\_\_

Did any of your acute cAIS patients seen in July 2020 have evidence of SARS-CoV-2 during the time of their stroke presentation (positive PCR; IgM and/or IgG, antigen, or MIS-C/PIMS-TS)?

- Yes    No  
 (MIS-C = Multisystem Inflammatory Syndrome of Childhood (associated with SARS-CoV-2/ COVID-19);  
 PIMS-TS = Paediatric Inflammatory Multisystem Syndrome; temporally associated with SARS-CoV-2)



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How many acute cAIS patients tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic from virus) in July 2020?

- 1    2    3    4
- 5    6    7    8
- 9    10    11    12
- 13    14    15    16
- 17    18    19    20
- Greater than 20

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\*We may contact you at a later time to capture the details of this/these case(s).

How many hospitalized pediatric patients (0 to < 18 years) tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in July 2020?

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Please check "Not able to obtain this information" if you are not able to obtain number above (hospitalized pediatric patients (0 to < 18 years) that tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in July 2020).

NOT able to obtain this information

Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in July 2020, please indicate the number positive by PCR:

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
- 8    9    10    11
- 12    13    14    15
- 16    17    18    19
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- 151    152    153
- 154    155    156
- 157    158    159
- 160    161    162
- 163    164    165
- 166    167    168
- 169    170    171
- 172    173    174
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Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in July 2020, please indicate the number positive by Serology/Antibody (IgM and/or IgG):

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
- 8    9    10    11
- 12    13    14    15
- 16    17    18    19
- 20    21    22    23
- 24    25    26    27
- 28    29    30    31
- 32    33    34    35
- 36    37    38    39
- 40    41    42    43
- 44    45    46    47
- 48    49    50    51
- 52    53    54    55
- 56    57    58    59
- 60    61    62    63
- 64    65    66    67
- 68    69    70    71
- 72    73    74    75
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- 80    81    82    83
- 84    85    86    87
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- 96    97    98    99
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- 163    164    165
- 166    167    168
- 169    170    171
- 172    173    174
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**AUGUST 2020**

How many new acute (incident) cAIS patients were admitted to your hospital in AUGUST 2020?

Acute AIS defined as = new onset focal symptoms in last 10 days in arterial distribution with CT or MRI evidence of infarct.

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 Greater than 20

How many acute cAIS patients were tested for SARS-CoV-2?

\_\_\_\_\_

What was your institutional SARS-CoV-2 testing practice(s) in August 2020? Please check all that apply.

- PCR  
 Antibody / Serology  
 Antigen  
 Other  
 No Testing Performed/ Not Applicable

Other, Specify:

\_\_\_\_\_

Did any of your acute cAIS patients seen in August 2020 have evidence of SARS-CoV-2 during the time of their stroke presentation (positive PCR; IgM and/or IgG, antigen, or MIS-C/PIMS-TS)?

- Yes    No  
 (MIS-C = Multisystem Inflammatory Syndrome of Childhood (associated with SARS-CoV-2/ COVID-19); PIMS-TS = Paediatric Inflammatory Multisystem Syndrome; temporally associated with SARS-CoV-2)

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How many acute cAIS patients tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic from virus) in August 2020?

- 1    2    3    4  
 5    6    7    8  
 9    10    11    12  
 13    14    15    16  
 17    18    19    20  
 Greater than 20
- 

\*We may contact you at a later time to capture the details of this/these case(s).

How many hospitalized pediatric patients (0 to < 18 years) tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in August 2020?

- 0    1    2    3  
 4    5    6    7  
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Please check "Not able to obtain this information" if you are not able to obtain number above (hospitalized pediatric patients (0 to < 18 years) that tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in August 2020).

NOT able to obtain this information

Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in August 2020, please indicate the number positive by PCR:

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
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- 12    13    14    15
- 16    17    18    19
- 20    21    22    23
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- 172    173    174
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Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in August 2020, please indicate the number positive by Serology/Antibody (IgM and/or IgG):

Not able to obtain the breakdown of numbers by testing type

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 16  17  18  19  
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 175

**SEPTEMBER 2020**

How many new acute (incident) cAIS patients were admitted to your hospital in SEPTEMBER 2020?

Acute AIS defined as = new onset focal symptoms in last 10 days in arterial distribution with CT or MRI evidence of infarct.

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 20  
 Greater than 20

How many acute cAIS patients were tested for SARS-CoV-2?

\_\_\_\_\_

What was your institutional SARS-CoV-2 testing practice(s) in September 2020? Please check all that apply.

- PCR  
 Antibody / Serology  
 Antigen  
 Other  
 No Testing Performed/ Not Applicable

Other, Specify:

\_\_\_\_\_

Did any of your acute cAIS patients seen in September 2020 have evidence of SARS-CoV-2 during the time of their stroke presentation (positive PCR; IgM and/or IgG, antigen, or MIS-C/PIMS-TS)?

- Yes    No  
 (MIS-C = Multisystem Inflammatory Syndrome of Childhood (associated with SARS-CoV-2/ COVID-19);  
 PIMS-TS = Paediatric Inflammatory Multisystem Syndrome; temporally associated with SARS-CoV-2)

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How many acute cAIS patients tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic from virus) in September 2020?

- 1    2    3    4  
 5    6    7    8  
 9    10    11    12  
 13    14    15    16  
 17    18    19    20  
 Greater than 20
- 

\*We may contact you at a later time to capture the details of this/these case(s).

How many hospitalized pediatric patients (0 to < 18 years) tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in September 2020?

- 0    1    2    3  
 4    5    6    7  
 8    9    10    11  
 12    13    14    15  
 16    17    18    19  
 20    21    22    23  
 24    25    26    27  
 28    29    30    31  
 32    33    34    35  
 36    37    38    39  
 40    41    42    43  
 44    45    46    47  
 48    49    50    51  
 52    53    54    55  
 56    57    58    59  
 60    61    62    63  
 64    65    66    67  
 68    69    70    71  
 72    73    74    75  
 76    77    78    79  
 80    81    82    83  
 84    85    86    87  
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 92    93    94    95  
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 139    140    141  
 142    143    144  
 145    146    147  
 148    149    150  
 151    152    153  
 154    155    156  
 157    158    159  
 160    161    162  
 163    164    165  
 166    167    168  
 169    170    171  
 172    173    174  
 175

Please check "Not able to obtain this information" if you are not able to obtain number above (hospitalized pediatric patients (0 to < 18 years) that tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in September 2020).

NOT able to obtain this information

Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in September 2020, please indicate the number positive by PCR:

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
- 8    9    10    11
- 12    13    14    15
- 16    17    18    19
- 20    21    22    23
- 24    25    26    27
- 28    29    30    31
- 32    33    34    35
- 36    37    38    39
- 40    41    42    43
- 44    45    46    47
- 48    49    50    51
- 52    53    54    55
- 56    57    58    59
- 60    61    62    63
- 64    65    66    67
- 68    69    70    71
- 72    73    74    75
- 76    77    78    79
- 80    81    82    83
- 84    85    86    87
- 88    89    90    91
- 92    93    94    95
- 96    97    98    99
- 100    101    102
- 103    104    105
- 106    107    108
- 109    110    111
- 112    113    114
- 115    116    117
- 118    119    120
- 121    122    123
- 124    125    126
- 127    128    129
- 130    131    132
- 133    134    135
- 136    137    138
- 139    140    141
- 142    143    144
- 145    146    147
- 148    149    150
- 151    152    153
- 154    155    156
- 157    158    159
- 160    161    162
- 163    164    165
- 166    167    168
- 169    170    171
- 172    173    174
- 175

Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in September 2020, please indicate the number positive by Serology/Antibody (IgM and/or IgG):

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
- 8    9    10    11
- 12    13    14    15
- 16    17    18    19
- 20    21    22    23
- 24    25    26    27
- 28    29    30    31
- 32    33    34    35
- 36    37    38    39
- 40    41    42    43
- 44    45    46    47
- 48    49    50    51
- 52    53    54    55
- 56    57    58    59
- 60    61    62    63
- 64    65    66    67
- 68    69    70    71
- 72    73    74    75
- 76    77    78    79
- 80    81    82    83
- 84    85    86    87
- 88    89    90    91
- 92    93    94    95
- 96    97    98    99
- 100    101    102
- 103    104    105
- 106    107    108
- 109    110    111
- 112    113    114
- 115    116    117
- 118    119    120
- 121    122    123
- 124    125    126
- 127    128    129
- 130    131    132
- 133    134    135
- 136    137    138
- 139    140    141
- 142    143    144
- 145    146    147
- 148    149    150
- 151    152    153
- 154    155    156
- 157    158    159
- 160    161    162
- 163    164    165
- 166    167    168
- 169    170    171
- 172    173    174
- 175

**OCTOBER 2020**

How many new acute (incident) cAIS patients were admitted to your hospital in OCTOBER 2020?

Acute AIS defined as = new onset focal symptoms in last 10 days in arterial distribution with CT or MRI evidence of infarct.

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 20  
 Greater than 20

How many acute cAIS patients were tested for SARS-CoV-2?

\_\_\_\_\_

What was your institutional SARS-CoV-2 testing practice(s) in October 2020? Please check all that apply.

- PCR  
 Antibody / Serology  
 Antigen  
 Other  
 No Testing Performed/ Not Applicable

Other, Specify:

\_\_\_\_\_

Did any of your acute cAIS patients seen in October 2020 have evidence of SARS-CoV-2 during the time of their stroke presentation (positive PCR; IgM and/or IgG, antigen, or MIS-C/PIMS-TS)?

- Yes    No  
 (MIS-C = Multisystem Inflammatory Syndrome of Childhood (associated with SARS-CoV-2/ COVID-19);  
 PIMS-TS = Paediatric Inflammatory Multisystem Syndrome; temporally associated with SARS-CoV-2)

---

How many acute cAIS patients tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic from virus) in October 2020?

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- 18
- 19
- 20
- Greater than 20

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\*We may contact you at a later time to capture the details of this/these case(s).



How many hospitalized pediatric patients (0 to < 18 years) tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in October 2020?

- 0    1    2    3  
 4    5    6    7  
 8    9    10    11  
 12    13    14    15  
 16    17    18    19  
 20    21    22    23  
 24    25    26    27  
 28    29    30    31  
 32    33    34    35  
 36    37    38    39  
 40    41    42    43  
 44    45    46    47  
 48    49    50    51  
 52    53    54    55  
 56    57    58    59  
 60    61    62    63  
 64    65    66    67  
 68    69    70    71  
 72    73    74    75  
 76    77    78    79  
 80    81    82    83  
 84    85    86    87  
 88    89    90    91  
 92    93    94    95  
 96    97    98    99  
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 103    104    105  
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 130    131    132  
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 136    137    138  
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 142    143    144  
 145    146    147  
 148    149    150  
 151    152    153  
 154    155    156  
 157    158    159  
 160    161    162  
 163    164    165  
 166    167    168  
 169    170    171  
 172    173    174  
 175

Please check "Not able to obtain this information" if you are not able to obtain number above (number of hospitalized pediatric patients (0 to < 18 years) that tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in October 2020).

NOT able to obtain this information

Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in October 2020, please indicate the number positive by PCR:

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
- 8    9    10    11
- 12    13    14    15
- 16    17    18    19
- 20    21    22    23
- 24    25    26    27
- 28    29    30    31
- 32    33    34    35
- 36    37    38    39
- 40    41    42    43
- 44    45    46    47
- 48    49    50    51
- 52    53    54    55
- 56    57    58    59
- 60    61    62    63
- 64    65    66    67
- 68    69    70    71
- 72    73    74    75
- 76    77    78    79
- 80    81    82    83
- 84    85    86    87
- 88    89    90    91
- 92    93    94    95
- 96    97    98    99
- 100    101    102
- 103    104    105
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- 115    116    117
- 118    119    120
- 121    122    123
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- 148    149    150
- 151    152    153
- 154    155    156
- 157    158    159
- 160    161    162
- 163    164    165
- 166    167    168
- 169    170    171
- 172    173    174
- 175

Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in October 2020, please indicate the number positive by Serology/Antibody (IgM and/or IgG):

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
- 8    9    10    11
- 12    13    14    15
- 16    17    18    19
- 20    21    22    23
- 24    25    26    27
- 28    29    30    31
- 32    33    34    35
- 36    37    38    39
- 40    41    42    43
- 44    45    46    47
- 48    49    50    51
- 52    53    54    55
- 56    57    58    59
- 60    61    62    63
- 64    65    66    67
- 68    69    70    71
- 72    73    74    75
- 76    77    78    79
- 80    81    82    83
- 84    85    86    87
- 88    89    90    91
- 92    93    94    95
- 96    97    98    99
- 100    101    102
- 103    104    105
- 106    107    108
- 109    110    111
- 112    113    114
- 115    116    117
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- 121    122    123
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- 133    134    135
- 136    137    138
- 139    140    141
- 142    143    144
- 145    146    147
- 148    149    150
- 151    152    153
- 154    155    156
- 157    158    159
- 160    161    162
- 163    164    165
- 166    167    168
- 169    170    171
- 172    173    174
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**NOVEMBER 2020**

How many new acute (incident) cAIS patients were admitted to your hospital in NOVEMBER 2020?

Acute AIS defined as = new onset focal symptoms in last 10 days in arterial distribution with CT or MRI evidence of infarct.

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 Greater than 20

How many acute cAIS patients were tested for SARS-CoV-2?

\_\_\_\_\_

What was your institutional SARS-CoV-2 testing practice(s) in November 2020? Please check all that apply.

- PCR  
 Antibody / Serology  
 Antigen  
 Other  
 No Testing Performed/ Not Applicable

Other, Specify:

\_\_\_\_\_

Did any of your acute cAIS patients seen in November 2020 have evidence of SARS-CoV-2 during the time of their stroke presentation (positive PCR; IgM and/or IgG, antigen, or MIS-C/PIMS-TS)?

- Yes    No  
 (MIS-C = Multisystem Inflammatory Syndrome of Childhood (associated with SARS-CoV-2/ COVID-19); PIMS-TS = Paediatric Inflammatory Multisystem Syndrome; temporally associated with SARS-CoV-2)

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How many acute cAIS patients tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic from virus) in November 2020?

- 1     2     3     4
- 5     6     7     8
- 9     10     11     12
- 13     14     15     16
- 17     18     19     20
- Greater than 20

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\*We may contact you at a later time to capture the details of this/these case(s).

How many hospitalized pediatric patients (0 to < 18 years) tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in November 2020?

- 0    1    2    3  
 4    5    6    7  
 8    9    10    11  
 12    13    14    15  
 16    17    18    19  
 20    21    22    23  
 24    25    26    27  
 28    29    30    31  
 32    33    34    35  
 36    37    38    39  
 40    41    42    43  
 44    45    46    47  
 48    49    50    51  
 52    53    54    55  
 56    57    58    59  
 60    61    62    63  
 64    65    66    67  
 68    69    70    71  
 72    73    74    75  
 76    77    78    79  
 80    81    82    83  
 84    85    86    87  
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 163    164    165  
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 169    170    171  
 172    173    174  
 175

Please check "Not able to obtain this information" if you are not able to obtain number above (number of hospitalized pediatric patients (0 to < 18 years) that tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in November 2020).

NOT able to obtain this information

Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in November 2020, please indicate the number positive by PCR:

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
- 8    9    10    11
- 12    13    14    15
- 16    17    18    19
- 20    21    22    23
- 24    25    26    27
- 28    29    30    31
- 32    33    34    35
- 36    37    38    39
- 40    41    42    43
- 44    45    46    47
- 48    49    50    51
- 52    53    54    55
- 56    57    58    59
- 60    61    62    63
- 64    65    66    67
- 68    69    70    71
- 72    73    74    75
- 76    77    78    79
- 80    81    82    83
- 84    85    86    87
- 88    89    90    91
- 92    93    94    95
- 96    97    98    99
- 100    101    102
- 103    104    105
- 106    107    108
- 109    110    111
- 112    113    114
- 115    116    117
- 118    119    120
- 121    122    123
- 124    125    126
- 127    128    129
- 130    131    132
- 133    134    135
- 136    137    138
- 139    140    141
- 142    143    144
- 145    146    147
- 148    149    150
- 151    152    153
- 154    155    156
- 157    158    159
- 160    161    162
- 163    164    165
- 166    167    168
- 169    170    171
- 172    173    174
- 175

Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in November 2020, please indicate the number positive by Serology/Antibody (IgM and/or IgG):

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
- 8    9    10    11
- 12    13    14    15
- 16    17    18    19
- 20    21    22    23
- 24    25    26    27
- 28    29    30    31
- 32    33    34    35
- 36    37    38    39
- 40    41    42    43
- 44    45    46    47
- 48    49    50    51
- 52    53    54    55
- 56    57    58    59
- 60    61    62    63
- 64    65    66    67
- 68    69    70    71
- 72    73    74    75
- 76    77    78    79
- 80    81    82    83
- 84    85    86    87
- 88    89    90    91
- 92    93    94    95
- 96    97    98    99
- 100    101    102
- 103    104    105
- 106    107    108
- 109    110    111
- 112    113    114
- 115    116    117
- 118    119    120
- 121    122    123
- 124    125    126
- 127    128    129
- 130    131    132
- 133    134    135
- 136    137    138
- 139    140    141
- 142    143    144
- 145    146    147
- 148    149    150
- 151    152    153
- 154    155    156
- 157    158    159
- 160    161    162
- 163    164    165
- 166    167    168
- 169    170    171
- 172    173    174
- 175



**DECEMBER 2020**

How many new acute (incident) cAIS patients were admitted to your hospital in DECEMBER 2020?

Acute AIS defined as = new onset focal symptoms in last 10 days in arterial distribution with CT or MRI evidence of infarct.

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 16  
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 18  
 19  
 20  
 Greater than 20

How many acute cAIS patients were tested for SARS-CoV-2?

\_\_\_\_\_

What was your institutional SARS-CoV-2 testing practice(s) in December 2020? Please check all that apply.

- PCR  
 Antibody / Serology  
 Antigen  
 Other  
 No Testing Performed/ Not Applicable

Other, Specify:

\_\_\_\_\_

Did any of your acute cAIS patients seen in December 2020 have evidence of SARS-CoV-2 during the time of their stroke presentation (positive PCR; IgM and/or IgG, antigen, or MIS-C/PIMS-TS)?

- Yes    No  
 (MIS-C = Multisystem Inflammatory Syndrome of Childhood (associated with SARS-CoV-2/ COVID-19);  
 PIMS-TS = Paediatric Inflammatory Multisystem Syndrome; temporally associated with SARS-CoV-2)

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How many acute cAIS patients tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic from virus) in December 2020?

- 1    2    3    4  
 5    6    7    8  
 9    10    11    12  
 13    14    15    16  
 17    18    19    20  
 Greater than 20
- 

\*We may contact you at a later time to capture the details of this/these case(s).

How many hospitalized pediatric patients (0 to < 18 years) tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in December 2020?

- 0    1    2    3  
 4    5    6    7  
 8    9    10    11  
 12    13    14    15  
 16    17    18    19  
 20    21    22    23  
 24    25    26    27  
 28    29    30    31  
 32    33    34    35  
 36    37    38    39  
 40    41    42    43  
 44    45    46    47  
 48    49    50    51  
 52    53    54    55  
 56    57    58    59  
 60    61    62    63  
 64    65    66    67  
 68    69    70    71  
 72    73    74    75  
 76    77    78    79  
 80    81    82    83  
 84    85    86    87  
 88    89    90    91  
 92    93    94    95  
 96    97    98    99  
 100    101    102  
 103    104    105  
 106    107    108  
 109    110    111  
 112    113    114  
 115    116    117  
 118    119    120  
 121    122    123  
 124    125    126  
 127    128    129  
 130    131    132  
 133    134    135  
 136    137    138  
 139    140    141  
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 145    146    147  
 148    149    150  
 151    152    153  
 154    155    156  
 157    158    159  
 160    161    162  
 163    164    165  
 166    167    168  
 169    170    171  
 172    173    174  
 175

Please check "Not able to obtain this information" if you are not able to obtain number above (number of hospitalized pediatric patients (0 to < 18 years) that tested positive for SARS-CoV-2 (PCR or antibody/serology; symptomatic or asymptomatic) in December 2020).

NOT able to obtain this information

Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in December 2020, please indicate the number positive by PCR:

Not able to obtain the breakdown of numbers by testing type

- 0  1  2  3  
 4  5  6  7  
 8  9  10  11  
 12  13  14  15  
 16  17  18  19  
 20  21  22  23  
 24  25  26  27  
 28  29  30  31  
 32  33  34  35  
 36  37  38  39  
 40  41  42  43  
 44  45  46  47  
 48  49  50  51  
 52  53  54  55  
 56  57  58  59  
 60  61  62  63  
 64  65  66  67  
 68  69  70  71  
 72  73  74  75  
 76  77  78  79  
 80  81  82  83  
 84  85  86  87  
 88  89  90  91  
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 96  97  98  99  
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 112  113  114  
 115  116  117  
 118  119  120  
 121  122  123  
 124  125  126  
 127  128  129  
 130  131  132  
 133  134  135  
 136  137  138  
 139  140  141  
 142  143  144  
 145  146  147  
 148  149  150  
 151  152  153  
 154  155  156  
 157  158  159  
 160  161  162  
 163  164  165  
 166  167  168  
 169  170  171  
 172  173  174  
 175

Of the hospitalized pediatric patients (0 to < 18 years, with or without stroke) that tested positive for SARS-CoV-2 in December 2020, please indicate the number positive by Serology/Antibody (IgM and/or IgG):

Not able to obtain the breakdown of numbers by testing type

- 0    1    2    3
- 4    5    6    7
- 8    9    10    11
- 12    13    14    15
- 16    17    18    19
- 20    21    22    23
- 24    25    26    27
- 28    29    30    31
- 32    33    34    35
- 36    37    38    39
- 40    41    42    43
- 44    45    46    47
- 48    49    50    51
- 52    53    54    55
- 56    57    58    59
- 60    61    62    63
- 64    65    66    67
- 68    69    70    71
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- 157    158    159
- 160    161    162
- 163    164    165
- 166    167    168
- 169    170    171
- 172    173    174
- 175

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**Authorship**

---

Please sign if you DO NOT want to be listed in the appendix of contributing authors for the resulting manuscript.

\_\_\_\_\_

---

Would it be ok for project leaders to contact you about any cases you report to be positive for SARS-CoV-2/COVID-19?

- Yes
- No

---

Please add any additional notes here:

\_\_\_\_\_

## Patient Information

Patient ID (pt\_id)

\_\_\_\_\_

IPSS ID (ipssid)

\_\_\_\_\_

### Patient Information

Was the patient admitted? (admityes)

Yes  No

Admission date (daent)

\_\_\_\_\_

What was the reason for hospital admission? Check all that apply. (hosp\_admit)

- Stroke/strokes symptoms (aphasia, hemiparesis)  
 COVID-19 related symptoms  
 Other

Please specify reason for admission (admit\_reas)

\_\_\_\_\_

Sex (sex)

Male  Female

Birth month (birmont)

- January  
 February  
 March  
 April  
 May  
 June  
 July  
 August  
 September  
 October  
 November  
 December

Birth year (biryear)

\_\_\_\_\_

### Race

**Caucasian/White:** Includes N. America, North, East, West Europe, Australia/New Zealand, Former Soviet Union

**Black:** Includes African, African-American, -Canadian, Caribbean; Excludes those of North African descent

**Southeast Asian:** Includes Chinese, Korean, Japanese, Vietnamese, Cambodian, Thai, Laotian, Taiwanese, Filipino, Malaysian etc.

**East Indian/South Asian:** Includes East Indian, Pakistani, Sri Lankan, Bangladeshi etc.

**Middle Eastern:** Includes North Africa and Arab Countries

**First Nations/Aboriginal:** Includes Canadian, American, including Alaskan

	Caucasian / White	Black	Southeast Asian	East Indian / South Asian	Middle Eastern	First Nations / Aboriginal	Other	Unknown
Child (childrac)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Child's race is "Other". Provide any relevant information (e.g. country of origin) (childot)

\_\_\_\_\_ (main)

### Stroke Details

Age at stroke (strage)

- Neonate (< = 28 days of life or presumed perinatal stroke)  
 Older infant or child (< 19th birthday)

Date of stroke symptoms onset (date of imaging that diagnosed stroke if stroke was asymptomatic) (doe)

\_\_\_\_\_

If exact time is unknown, describe (e.g. woke with deficit) (timedes)

\_\_\_\_\_ (main)

Stroke types (stroke\_type)

- Childhood arterial ischemic stroke (AIS)  
 Childhood cerebral sinovenous thrombosis (CSVt)  
 Acute neonatal arterial ischemic stroke (NAIS)  
 Acute neonatal cerebral sinovenous thrombosis (NCSVt)  
 (Check all that apply main)



# Covid Related

## COVID-19 Related Questions

How was this patient tested for COVID-19? Please check all that apply:

- PCR
- Antigen
- Antibody (ELISA)
- Other

Specify other test:

---

Was patient tested for COVID-19 on multiple dates?

- Yes
- No

Please describe testing:

---

What symptoms of COVID-19 did the patient have? Check all that apply.

- None (asymptomatic)/ COVID-19 was found on routine hospital testing
- Fever
- Diarrhea
- Rash
- Cough
- Sneezing
- Runny Nose
- Multisystem Inflammatory Syndrome in Children (Kawasaki-like Disease)
- Severe Respiratory Distress
- Other

Other COVID Symptoms

---

Was the patient intubated because of COVID-19?

- Yes
- No

Was the patient on ECMO due to COVID-19?

- Yes
- No

Was the patient septic/in septic shock due to COVID-19?

- Yes
- No

Did the patient die due to COVID-19 or due to COVID-19 related symptoms?

- Yes
- No

Please provide any additional relevant information:

---

---

**Stroke Related Questions**

---

Do you think the stroke was related to COVID-19?

- Yes
  - No
  - Maybe
- 

Do you think the stroke was primarily caused by COVID-19 or COVID-19 related complications?

- Yes
- No
- Maybe

# Stroke Risk Radiology

## A. Cardiac

Are there cardiac risk factors? (card)  Yes  No  Not assessed

Please check all that apply:

- Congenital Heart Disease
- Patent Foramen Ovale
- Cardiomyopathy
- Myocarditis
- Arrhythmia
- Other

Specify type of congenital heart disease:

\_\_\_\_\_

Other cardiac diagnosis:

\_\_\_\_\_

## B. Arteriopathy

This section does not apply.

Are there arteriopathy risk factors? (art)  Yes  No  Not assessed

Dissection (dissprov)  Proven  Presumed  
 No (main)

Moyamoya (moyaprov)  Proven  Presumed  
 No (main)

Focal cerebral arteriopathy (FCA) (fcaprov)  Proven  Presumed  
 No (main)

Focal cerebral arteriopathy, specify type (fcath)  Transient cerebral arteriopathy of childhood (TCA)  
 Post-varicella angiopathy (PVAR)/chickenpox in the last 12 months  
 Unknown  
 Other (main)

FCA type: other, specify (fcaoth)

\_\_\_\_\_

(main)

Vasculitis (not TCA, FCA, or PVAR) (vascpv)  Proven  Presumed  
 No (main)

Other arteriopathy (artho)  (main)

Other arteriopathy, specify (artspe)

\_\_\_\_\_  
(main)

### C. Patient disease/condition-related risk factors

Iron deficiency/anaemia (anemia)  Yes  No  Not assessed  
(csvt)

Sickle cell anaemia (sickle)  Yes  No  Not assessed

Genetic syndrome (genetsy)  Yes  No  Not assessed

Genetic syndrome, specify (genetsys)

\_\_\_\_\_  
(main)

Prothrombotic disorder (prothrom)  Yes  No  Not assessed  
(main)

Prothrombotic disorder, specify: (prothrosp)

- Oral contraceptives
- L-asparaginase exposure
- APCR
- ATIII
- aPTT
- Factor VIII
- Fibrinogen
- Homocysteine
- Lipoprotein(a)
- Lupus anticoagulant
- Protein S Total
- Protein S Free
- Protein C
- Factor V Leiden
- MTHFR
- Prothrombin gene
- ACLA IgG
- D-Dimer
- Other  
(main)

Specify other prothrombotic test:

\_\_\_\_\_

Pre-existing hypertension (hypertension)  Yes  No  Not assessed

Diabetes (diabetes)  Yes  No  Unknown

History of Smoking (smoking)  Yes  No  Unknown

Inflammatory/auto-immune illness(inflam)  Yes  No  Unknown  
(main)

Active Malignancy (malig)  Yes  No  Unknown  
(main)

History of Cranial Radiation (cranrad)	<input type="radio"/> Yes (main)	<input type="radio"/> No	<input type="radio"/> Unknown
Severe Dehydration (dehyd)	<input type="radio"/> Yes (main)	<input type="radio"/> No	<input type="radio"/> Unknown
Meningitis (mening)	<input type="radio"/> Yes (main)	<input type="radio"/> No	<input type="radio"/> Not assessed
Mastoiditis (mastoid)	<input type="radio"/> Yes (main)	<input type="radio"/> No	<input type="radio"/> Not assessed
Inflammatory Bowel Disease (ibd)	<input type="radio"/> Yes (main)	<input type="radio"/> No	<input type="radio"/> Not assessed
Nephrotic Syndrome (neph)	<input type="radio"/> Yes (main)	<input type="radio"/> No	<input type="radio"/> Not assessed
Other Risk Factors (othris)	<input type="radio"/>		
Other stroke risk factors, specify/describe (othrissp)			

(main)

### Diagnostic Workup

<p>FOR ARTERIAL ISCHEMIC STROKE (AIS) ONLY</p> <p>Diagnostic Workup, please select all that apply (diagscan)</p>	<input type="checkbox"/> Head Ultrasound <input type="checkbox"/> Head CT <input type="checkbox"/> CTA Head <input type="checkbox"/> CTA Neck <input type="checkbox"/> MRI Brain <input type="checkbox"/> MRA Head <input type="checkbox"/> MRA Neck <input type="checkbox"/> Conventional Angiogram <input type="checkbox"/> Echocardiogram <input type="checkbox"/> Thrombophilia Studies (main)
<p>FOR CEREBRAL SINOVENOUS THROMBOSIS (CSVT) ONLY</p> <p>Diagnostic Workup, please select all that apply (diagscan)</p>	<input type="checkbox"/> Doppler Ultrasound (Venous) <input type="checkbox"/> Cranial Ultrasound <input type="checkbox"/> Head CT <input type="checkbox"/> CTV Head <input type="checkbox"/> MRI Brain <input type="checkbox"/> MRV Head <input type="checkbox"/> Catheter/Conventional Angiogram <input type="checkbox"/> Echocardiogram <input type="checkbox"/> Thrombophilia Studies (main)
Echo Type: (echo_type)	<input type="checkbox"/> Trans-thoracic echo (TTE) <input type="checkbox"/> Trans-esophageal echo (TEE)
Done with Bubble Study? (echo_bubble)	<input type="radio"/> Yes <input type="radio"/> No

---

Stroke Location and Characteristics, please check all that apply (stroloc)

- Left Anterior Cerebral Artery
- Left Middle Cerebral Artery
- Left Posterior Cerebral Artery
- Right Anterior Cerebral Artery
- Right Middle Cerebral Artery
- Right Posterior Cerebral Artery
- Left Cerebellum
- Right Cerebellum
- Midbrain
- Pons
- Medulla
- Hemorrhagic Transformation of Infarction
- Other (main)

---

Other AIS Location, Specify:

\_\_\_\_\_

---

Stroke Location and Characteristics, please check all that apply (stroloc)

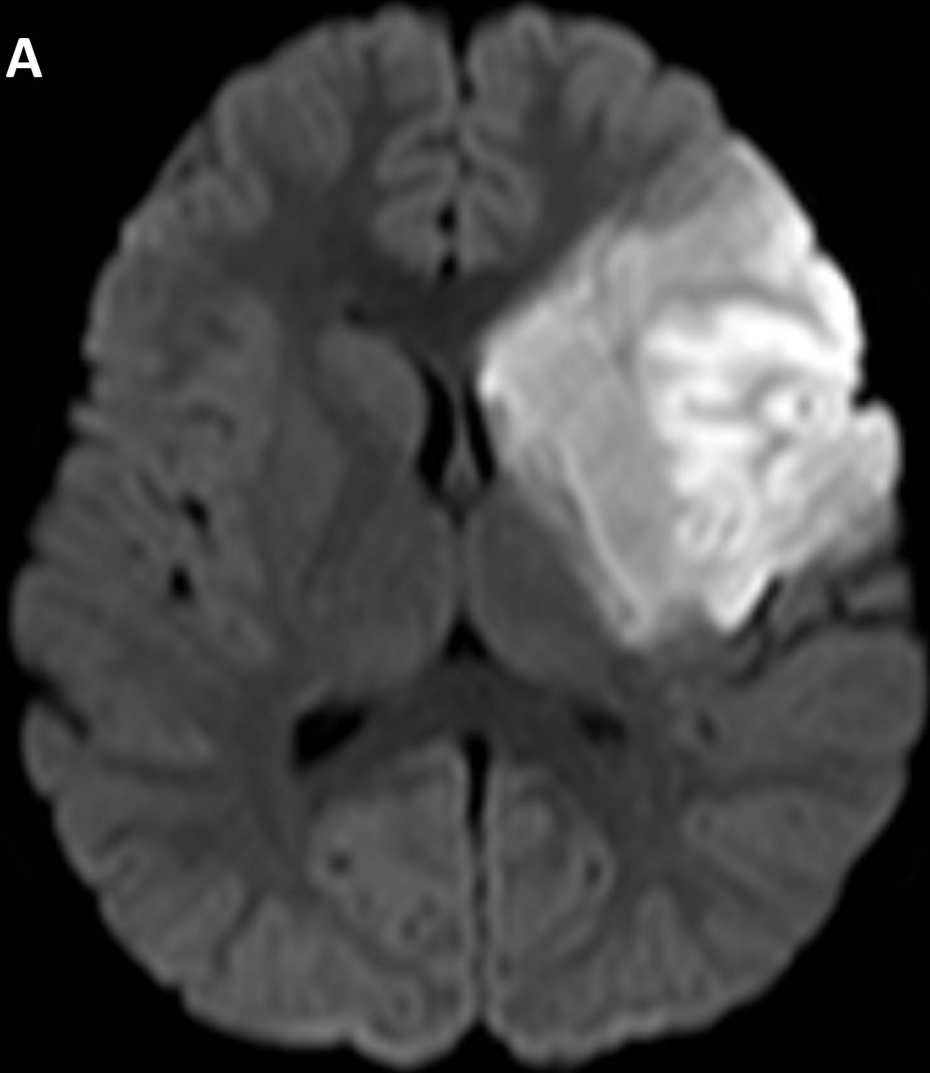
- Superior Sagittal Sinus
- Inferior Sagittal Sinus
- Straight Sinus
- Confluence of Sinuses
- Left Transverse Sinus
- Left Sigmoid Sinus
- Right Transverse Sinus
- Right Sigmoid Sinus
- Medullary Vein
- Cortical Vein
- Venous Ischemic Infarction
- Venous Hemorrhagic Infarction
- Other (main)

---

Other CSVT Location, Specify:

\_\_\_\_\_

**Supplemental Figure 3.** Arterial ischemic stroke and focal cerebral arteriopathy in a child with SARS-CoV-2. A) Axial diffusion weighted imaging in a 6-year-old male demonstrates restricted diffusion involving both the left lentiform nucleus and much of the left anterior middle cerebral artery territory. B) Coronal magnetic resonance angiogram maximum intensity projection of the same patient demonstrates irregularity and narrowing of the left distal internal carotid artery, A1 and M1 segments (arrowheads), and a focal cutoff of the left M2 segment anterior division (arrow).

**A****B**

Supplemental Figure 3. Example of Focal Cerebral Arteriopathy



**Supplemental Table 1. Study Sites and Site Investigators<sup>‡</sup>**

<b>Institution</b>	<b>Site Investigator(s)<sup>‡</sup></b>
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*Dr S N Medical College, Umaid Hospital for Women and Children, Jodhpur, Rajasthan, India	Manish Parakh, MD
*Evelina London Children's Hospital, London, United Kingdom	Kevin Meesters Thomas Rossor
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*Latifa Women and Children Hospital Dubai, United Arab Emirates	Pawan Kashyape, MD, DCH, NB, FRCPCH, CCT
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*Stollery Children's Hospital, Edmonton, Alberta, Canada	Janette Mailo, MD
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*The Children's Hospital at St. Francis, Tulsa, Oklahoma, United States	Kamna Jaiswal, MD Kellie Brown, RN
*The Royal Children's Hospital, Melbourne, Australia	Belinda Stojanovski, BSc Mark T Mackay, MD
*The University of Toronto, The Hospital for Sick Children, Toronto, Ontario, Canada	Adriana Carolina Vargas Nino, MD Daune McGregor, MD, MSc, MBA Gabrielle deVeber, MD Ishvinder Bhathal, NP Liza Pulcine, MD, MSC Mahendra Moharir, MD, MSc Nomazulu Dlamini, MBBS, MSs, PhD

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‡= Site investigators contributed to data collection only with exception of co-authors whose additional contributions are cited in Appendix 1;

\*= Institutions provided SARS-CoV-2 positive hospitalization numbers plus childhood arterial ischemic stroke case numbers

**Supplemental Table 2.** Clinical details of 23 pediatric patients with SARS-CoV-2 and arterial ischemic stroke

<b>Demographics</b>	<b>SARS-CoV-2 tests and symptoms</b>	<b>Critical illness*</b>	<b>Stroke location</b>	<b>Relationship between SARS-CoV-2 and stroke/ Other stroke risk factors</b>
M, 2 years, Chile (Native/White)	PCR+ 5 days prior to stroke ictus; fever, rash, severe respiratory distress, MIS-C 5 days prior to stroke ictus	Yes: septic shock, MIS-C	MRI: right MCA and right PCA infarct with hemorrhagic transformation MRA: decreased caliber in V4 segment of vertebral arteries, basilar trunk, distal right P2	Likely causative or contributing factor (arteritis/vasculitis); patient also had Wiskott Aldrich syndrome with bone marrow transplant, recent brain abscess that was treated adequately, pre-existing hypertension, iron deficiency anemia
M, 6 years, Colombia (White)	IgG+ 8 days after stroke ictus; cough and sneezing 7 days prior to stroke ictus	No	MRI: left MCA infarct MRA and angiogram: focal irregular stenosis in left ICA, M1, A1	Likely causative or contributing factor (focal cerebral arteriopathy)
M, 8 years, United States (White)	PCR+ day of stroke ictus; fever, diarrhea, MIS-C 3 days prior to stroke ictus	Yes: intubated, MIS-C	MRI: left MCA infarct MRA: left MCA narrowing	Likely causative or contributing factor (focal cerebral arteriopathy)
F, 8 years, United States (Native American)±	IgG+ 1 day after stroke ictus; fever, cough, sneeze, and runny nose 21 days prior to stroke ictus	No	MRI: bilateral MCA infarcts; vessel wall imaging with concentric mural enhancement of left ICA MRA: left M1 occlusion Angiogram: distal MCA branches with arteriopathic changes	Likely causative or contributing factor (arteritis/vasculitis); also had significant iron deficiency anemia requiring transfusion

			Thrombectomy performed	
M, 16 years, United States (Black)±	PCR+ 30 days prior to stroke and IgG+ at stroke ictus; fever and cough 30 days prior to stroke ictus	No	MRI: complete left MCA infarct MRA: left M1 irregularity and occlusion of left MCA bifurcation	Likely causative or contributing factor (arteritis/vasculitis)
F, 16 years, United States (White)	PCR+ 28 days prior and day of stroke ictus; headache, fever, loss of taste and smell 28 days prior to stroke ictus	No	MRI: right ACA and MCA infarcts	Likely causative or contributing factor (focal cerebral arteriopathy)
M, 1 year, United States (White)	PCR+ 5 days prior to stroke ictus; none	No	MRI: left ACA, right MCA infarcts MRA: normal	Possible contributing factor; tetralogy of Fallot, pulmonary atresia with ventricular septal defect and major aortopulmonary collateral artery with hypoxia, arrhythmia
F, 1 year, Colombia (Black)	IgG+ 10 days after stroke ictus; none	Yes, septic shock related to burn	MRI: right MCA infarct MRA and angiogram: normal	Possible contributing factor; septic shock with pneumonia, bacteriemia, abdominal compartment syndrome
M, 3 years, Colombia (White)	PCR+ day of stroke ictus; none	No	MRI: left MCA infarct MRA: total occlusion of ICA Angiogram: narrowing of intracranial portion of ICA	Possible contributing factor; cervicocephalic dissection
M, 4 years, United States	IgG+ 2 days before stroke	No	MRI: left ACA, right ACA, right PCA	Possible contributing factor

(White Hispanic)	ictus (IgM not sent), PCR+ 19 days after stroke ictus; none		MRA: multifocal arterial irregularity/narrowing at the base of brain, spasm versus arteritis	(vasospasm versus arteritis); hydrocephalus, severe dehydration, PAI-1 homozygous
F, 12 years, United States (White)	PCR+ on day of stroke ictus; none	No	MRI: left MCA stroke MRA: right sided moyamoya, previously treated with revascularization procedure Angiogram: left ICA occlusion and subsequent reconstitution after mechanical thrombectomy from left ICA cavernous segment, early narrowing of left ICA  Thrombectomy performed	Possible contributing factor; Trisomy 21 with right sided moyamoya and early narrowing on left with thrombus
M, 13 year, Egypt (Middle Eastern)	IgG+ day of stroke ictus; fever, sneeze, runny nose 14 days before presentation, headache on day of stroke ictus, chest CT with bilateral patchy areas of ground glass with interlobular septal thickening in the periphery associated with consolidative patches in upper lobes and superior	No	MRI: left MCA infarct MRA and angiogram: occlusion of supraclinoid ICA and MCA HCT: petechial hemorrhagic transformation in left basal ganglia after mechanical thrombectomy  Thrombectomy performed	Possible contributing factor; newly diagnosed mitral valve thickening and left atrial thrombus, possible rheumatic heart disease



	segments of lower lobes			
M, 14 years, Poland (White)	PCR+ 1 day after stroke ictus; none	No	MRI: left PCA infarct (thalamic) MRA: normal	Possible contributing factor; left ventricle myxoma with intracardiac thrombus and homozygous MTHFR mutation
F, 14 years, United States (Black)	IgG+ 3 days after stroke ictus (IgM not sent); none	No	MRI spine: anterior spinal artery infarct	Possible contributing factor (no known trauma)
F, 15 years, United Kingdom (Black)	IgG+ 2 days after stroke ictus; none	No	MRI: right ACA and right MCA infarcts MRA: right distal ICA and proximal M1/A1 narrowing, small left A1	Possible contributing factor; Trisomy 21 with mitral regurgitation with remote valve repair, possible early moyamoya syndrome
M, 15 years, United Kingdom (Black)	PCR+ 2 days after stroke ictus; none	No	MRI: right MCA, right PCA, pontine infarcts MRA: multiple dissections, pseudoaneurysm formation on follow-up imaging	Possible contributing factor; multiple dissections after trauma with later pseudoaneurysm formation, low protein C, low protein S
M, 16 years, Greece (White)	PCR+ day of stroke ictus; fever 1 day prior to stroke ictus, subtle changes on chest X-ray	No	MRI: right ACA, MCA, PCA infarcts MRA: right MCA stenosis with thickening of M2, right PCOM stenosis, right ICA narrowing, moderate focal stenosis of upper mesenteric artery	Possible contributing factor; Takayasu arteritis
M, 17 years, United States (White Hispanic)	PCR+ 4 days prior to stroke ictus and 8 days after stroke ictus, Serology+	No	MRI brain: left MCA, left PCA, right ACA, right MCA, left cerebellum, right cerebellum infarcts	Possible contributing factor; Hodgkin's lymphoma, cryptococcus

	5 days after stroke ictus; headache 7 days prior to stroke ictus, fatigue, generalized malaise, shortness of breath 6 days prior to stroke ictus		MRA: normal	meningitis, iron deficiency anemia, presumed vasculitis
M, 17 years, United States (White)	PCR+ 1 day after stroke ictus; none	No	MRI: left MCA, left PCA, right ACA, right MCA, right PCA infarcts MRA: normal	Possible contributing factor; acute anemia after motor vehicle accident, history of smoking
F, 2 years, France (White)	Serology+ 1 day after stroke ictus; none	No	MRI: left MCA infarct MRA and angiogram: moyamoya	Unlikely related; moyamoya syndrome with multiple arterial stenoses (mesenteric, aorta, hepatic, celiac), cutis marmorata, pleural AVM, porto-cava malformation, HHV-6 + in cerebrospinal fluid
M, 14 year, France (White)	IgG+ 2 days after stroke ictus; none	No	MRI: left MCA infarct MRA: normal	Unlikely related; patent foramen ovale
M, 16 years, United States (Black)	PCR+ 1 day prior to stroke ictus; none	No	MRI: right PCA, temporal lobe hemorrhages, subarachnoid hemorrhage, skull fracture CTA: normal	Unlikely related; head and neck trauma with skull fracture and hemorrhages
United States	Data not available	Data not available	Data not available	Data not available

\*Critical illness defined as intubation, septic shock, extracorporeal membrane oxygenation.

±Case previously published. ACA=anterior cerebral artery. AVM=arteriovenous malformation.

CT=computed tomography. ECMO=extracorporeal membrane oxygenation. F=female.

HCT=head computed tomography. HHV-6=human herpesvirus 6. ICA=internal carotid artery.

M=male. MRI=magnetic resonance imaging. MRA=magnetic resonance angiography. MCA=middle cerebral artery. MIS-C=multisystem inflammatory syndrome in children. MRV=magnetic resonance venography. MTHFR= methylenetetrahydrofolate reductase. PAI-1=plasminogen activator inhibitor type 1. PCA=posterior cerebral artery. PCOM=posterior communicating artery. PCR=polymerase chain reaction. SARS-CoV-2=severe acute respiratory syndrome coronavirus.

**Supplemental Table 3.** Reason for hospital admission and inflammatory markers for 23 pediatric stroke patients positive for SARS-CoV-2 (abnormal values indicated with italics)

<b>Demographics</b>	<b>Reason for hospital admission</b>	<b>Inflammatory Markers and CSF Studies (normal range; days from stroke ictus)</b>
M, 2 years, Chile (Native/White)	Already admitted to hospital for Wiskott Aldrich Syndrome management and complications at time of COVID-19 and MIS-C diagnosis and stroke, had sudden altered mental status and seizures at stroke ictus	<i>CRP 21.71</i> (<5 mg/dL; -3), <i>D-dimer 1,927.4 and 4,572.8</i> (≤500 ng/mL; -3 and 4), <i>ferritin 2,138 and 16,504</i> (30-400 ng/mL; -3 and 4), <i>procalcitonin 0.31 and 2.74</i> (<0.09 ng/mL; -4 and 4), <i>interleukin-6 183.9 and 451.1</i> (<7 pg/mL; -5 and 4)  CSF <i>WBC 7</i> (≤5 cells/mm <sup>3</sup> ), <i>RBC 7800</i> (0 cells/mm <sup>3</sup> ), <i>glucose 95</i> (60-80 mg/dL), <i>protein 135.6</i> (10-30 mg/dL), culture negative (7)
M, 6 years, Columbia (White)	Deficits due to stroke (right hemiparesis and headache)	<i>ESR 15</i> (7-15 mm/hr; 0), <i>CRP 17.4</i> (<10 mg/L; 0), <i>D-dimer 141.9</i> (<500 ng/mL; 0), <i>ferritin 39.6</i> (17-464 ng/mL; 0), <i>anticardiolipin IgM &lt;2</i> (<12 MPL/mL; 0), <i>anticardiolipin IgG 6</i> (<10 GPL/mL; 0), <i>antiphospholipid IgM 1.44</i> (<12 MPL/mL; 0), <i>antiphospholipid IgG 1.66</i> (<10 GPL/mL; 0)  CSF basic indices normal (9)
M, 8 years, United States (White)	COVID-19 symptoms and MIS-C	<i>CK 50</i> (38-174 u/L; 0), <i>ESR 2</i> (<10 mm/hr; 0), <i>CRP 2.3</i> (0-0.9 ng/dL; 0), <i>D-dimer 1310</i> (<600 ng/mL; 0), <i>ferritin 441</i> (20-250 ng/mL; 0), <i>procalcitonin 0.61</i> (<0.150 ng/mol; 4), <i>soluble interleukin-2 receptor 1200.3</i> (175-858.2 pg/mL; 4), <i>IL-4 5.3</i> (<2.2 pg/mL; 4), <i>IL-10 8.5</i> (<2.8 pg/mL; 4), <i>IL-17 13.5</i> (<1.4 pg/mL; 4), <i>IL-1 β 9.2</i> (<6.7 pg/mL; 4)

		CSF WBC 4 (0-5 cells/mm <sup>3</sup> ), RBC 0 (0-5 cells/mm <sup>3</sup> ), glucose 55 (37-75 mg/dL), protein 44 (12-26 mg/dL), no oligoclonal bands, IgG index 0.55 (normal), <i>neopterin</i> 37 (<20 nmol/L) (5)
F, 8 years, United States (Native American)±	Deficits due to stroke (right hemiparesis and aphasia with NIH Stroke Scale score 15)	<i>ESR</i> 14 (0-10 mm/hr; 5), <i>CRP</i> 1.2 (<0.9 mg/dL; 7), <i>D-dimer</i> 1.83 (<0.42 µg/mL FEU; 5), ferritin 41 (10-150 ng/mL; 5), anticardiolipin IgM 4 (0-12 MPL; 1), anticardiolipin IgG 6 (0-14 GPL; 1), β2 glycoprotein IgM 4 (0-20 SMU; 1), β2 glycoprotein IgG 0 (0-20 SMU; 1), <i>factor VIII assay</i> 316 (50-150%; 1)
M, 16 years, United States (Black)±	Deficits due to stroke (right hemiparesis and aphasia with NIH Stroke Scale score 19)	<i>ESR</i> 59 (0-15 mm/hr; 0), <i>CRP</i> 13.6 (0-1 mg/dL; 0), <i>D-dimer</i> 6.06 (0-0.5 µg/mL; 0), <i>ferritin</i> 468.7 (20-250 ng/mL; 12), anticardiolipin IgM 2.6 (<10 MPL; 0), anticardiolipin IgG 2.2 (<10 GPL; 0), β2 glycoprotein IgM 2.9 (<7 ELIA U/mL; 0), β2 glycoprotein IgG 1.2 (<7 ELIA U/mL; 0), <i>lupus anticoagulant positive</i> (negative; 0), <i>fibrinogen</i> 680 (150-400 mg/dL; 0), <i>troponin</i> 0.782 (<0.1 ng/mL; 0)
F, 16 years, United States (White)	Deficits due to stroke (left facial droop, left hemiparesis, headache)	<i>CRP</i> <0.5 (0.0-0.9 mg/dL; 26), <i>D-dimer</i> 0.28 (≤0.48 µg/mL; 26), anticardiolipin IgM 8.0 (≤20.0 CU; 26), anticardiolipin IgG 7.8 (≤20.0 CU; 26), β2 glycoprotein IgM 1.7 (≤20.0 CU; 26), β2 glycoprotein IgG <6.4 (≤20.0 CU; 26)
M, 1 year, United States (White)	Hypoxia in patient with Tetralogy of Fallot	<i>CK</i> 25 (72-367 U/L; 1), <i>CRP</i> 3.66 (0.48-1.52 mg/dL; -5), ferritin 264.4 (26.0-388.0 ng/mL; 10), <i>BNP</i> 111.2 (<73 pg/mL; -5), <i>procalcitonin</i> 0.12 (≤0.05 ng/mL; -2)
F, 1 year, Colombia (Black)	Boiling water burn	<i>CRP</i> 167.8 (<10 mg/L; 7), <i>D-dimer</i> 2,122 (<500 ng/mL; 0), C3

		11 (14-44 mg/dL; 11), <i>C4</i> 79 (88-165 mg/dL; 11)
M, 3 years, Colombia (White)	Deficits due to stroke (right hemiparesis)	ESR 7 (7-15 mm/hr; 0), <i>CRP</i> 24 (<5 mg/mL; 0), <i>D-dimer</i> 2,682 (<500 ng/mL; 0), ferritin 96.9 (17-464 mg/mL; 4), anticardiolipin IgM 0.83 (<12 MPL/mL; 4), anticardiolipin IgG 1.1 (<10 GPL/mL; 4)
M, 4 years, United States (White Hispanic)	Headache, vomiting, abdominal pain, poor oral intake, refusal to ambulate	<i>CK</i> 200 (31-152 IU; -3), ESR 7 and 13 (0-20 mm/hr; -2 and 1), <i>CRP</i> 1.27 and 1.38 (0.06-0.79 mg/dL; -2 and 1), <i>D-dimer</i> 0.49 (<0.54 ng/mL; 0), anticardiolipin IgM <12 (≤12 MPL/mL; 2), anticardiolipin IgG <14 (≤14 GPL/mL; 0), β2 glycoprotein IgM <9 (≤9 U/mL; 0), β2 glycoprotein IgG <9 (≤9 U/mL; 0)  CSF (extraventricular drain) WBC 4 (0-6 cells/mm <sup>3</sup> ), <i>RBC</i> 1,200 (0 cells/mm <sup>3</sup> ), glucose 75 (41-84 mg/dL), protein 31 (15-45 mg/dL), culture negative (3)
F, 12 years, United States (White)	Deficits due to stroke (difficulty ambulating, right facial droop)	<i>D-dimer</i> 2.02 (≤0.48 μg/mL; 0), β2 glycoprotein IgM <1.1 (≤20.0 CU; 2), β2 glycoprotein IgG ≤6.4 (≤20.0 CU; 2)
M, 13 year, Egypt (Middle Eastern)	Deficits due to stroke	<i>CK</i> 55 (<171 IU/L; 1); <i>CRP</i> 8.2 (<6 mg%; 3), <i>D-dimer</i> 0.83 (<0.55 ug/mIF EU; 4), <i>LDH</i> 359 (140-271 IU/L; 1), <i>TLC</i> 9.1 (13-16 <sup>^</sup> 3/μL; 1); <i>hemoglobin</i> 9.1 (13-16 gm%; 1)
M, 14 year, Poland (White)	Deficits due to stroke (nystagmus, diplopia, restricted up and downgaze, anisocoria)	<i>CK</i> 17 (0-270 U/L; 4), <i>CRP</i> 4.3 and 2.4 (0-10 mg/L; 1 and 4), <i>D-dimer</i> 419 (0-500 ng/mL; 4), anticardiolipin IgM < 2 (<2 U/mL; 15), anticardiolipin IgG <2 (<2 U/mL; 15)
F, 14 years, United States (Black)	Deficits due to stroke	ESR 16 (0-20 mm/hr; 3), <i>CRP</i> 0.18 (0.06-0.81 mg/L; 3), <i>D-dimer</i> 0.44 (<0.40 ng/mL; 4), anticardiolipin IgM <12 (≤12

		<p>MPL/mL; 6), anticardiolipin IgG &lt;14 (<math>\leq</math>14 GPL/mL; 6), <math>\beta</math>2 glycoprotein IgM &lt;9 (<math>\leq</math>9 U/mL; 3), <math>\beta</math>2 glycoprotein IgG &lt;9 (<math>\leq</math>9 U/mL; 3)</p> <p>CSF basic indices normal (3)</p>
F, 15 years, United Kingdom (Black)	Symptom due to stroke (generalized tonic clonic seizure)	<p>CK 71 (0-159 IU/L; 2), CRP &lt;1 (0-4 mg/L; 1), <i>D-dimer</i> 1.23 (0.0-0.55 mg/L; 2), ferritin 88 (4-114 <math>\mu</math>g/L; 2), anticardiolipin IgM 1.7 (0-9.3 U/mL; 1), anticardiolipin IgG 5.4 (0.0-12.1 U/mL; 1), <math>\beta</math>2 glycoprotein IgM 0.4 (0.0-6.6 U/mL; 1), <math>\beta</math>2 glycoprotein IgG 5.2 (0.0-10.0 U/mL; 1)</p>
M, 15 years, United Kingdom (Black)	Deficits due to stroke and headache	<p>ESR 2 (0-10 mm/hr; 2), CRP &lt;1 (0-4 mg/L; 2), <i>D-dimer</i> 1.23 (0.0-0.55 mg/L; 2), anticardiolipin IgM 1.3 (0-9.3 U/mL; 2), anticardiolipin IgG 4.8 (0.0-12.1 U/mL; 2), <math>\beta</math>2 glycoprotein IgM 0.2 (0.0-6.6 U/mL; 2), <math>\beta</math>2 glycoprotein IgG 4.1 (0.0-10.0 U/mL; 2)</p>
M, 16 years, Greece (White)	Deficits due to stroke	<p>CK 78 (&lt;170 IU; 1), ESR 2 (1-10 mm; 1), CRP 0.9 (&gt;2 mg/L; 1), <i>D-dimer</i> 170.7 (0-500 ng/mL; 1), ferritin 25.6 (23.9-336.2 ng/mL; 1), anticardiolipin IgM 1 (&lt;5 MPL/mL; 2), anticardiolipin IgG 1 (&lt;5 GPL/mL; 2), <math>\beta</math>2 glycoprotein IgM 2 (&lt;10 U/mL; 2), <math>\beta</math>2 glycoprotein IgG 1 (&lt;10 U/mL; 2)</p>
M, 17 years, United States (White Hispanic)	Cryptococcus meningitis	<p><i>ESR</i> 32 (0-15 mm/r; 0), <i>CRP</i> 167 (&lt;10.0 mg/L; 1), <i>ferritin</i> 637 (20-155 ng/mL; 0), <i>procalcitonin</i> 0.5 (<math>\leq</math>0.5 ng/mL; -2)</p> <p>CSF <i>WBC</i> 1022 (<math>\leq</math>5 cells/mm<sup>3</sup>), <i>RBC</i> 478 (0 cells/mm<sup>3</sup>), glucose 26 (40-70 mg/dL), protein 218 (8-32 mg/dL), <i>cryptococcal antigen positive titer</i> 1:320 (&lt;1:5) (-2)</p>

M, 17 years, United States (White)	Motor vehicle collision and deficits due to stroke	<i>CK</i> 533 (35-232 U/L; 5), <i>CRP</i> 9.7 (0.0-0.3 mg/dL; -2), <i>D-dimer</i> 3.66 (0.00-0.49 FEU; 1), ferritin 264.4 (26.0-388.0 ng/mL; -2), <i>procalcitonin</i> 2.02 ( $\leq$ 0.05 ng/mL; 1)
F, 2 years, France (White)	Deficits due to stroke	anticardiolipin IgG negative (negative; 2), $\beta$ 2 glycoprotein negative (negative; 2)  CSF basic indices normal
M, 14 year, France (White)	Deficits due to stroke	<i>CK</i> 99 (30-300 U/L; 2), <i>ESR</i> 2 (0-7 mm/hr; 4), <i>CRP</i> <0.5 (<6 mg/L; 2), ferritin 12 (15-80 $\mu$ g/L, anticardiolipin IgM negative (negative; 4), anticardiolipin IgG negative (negative; 4), $\beta$ 2 glycoprotein IgM negative (negative; 4), $\beta$ 2 glycoprotein IgG negative (negative; 4)  CSF basic indices normal (2)
M, 16 years, United States (Black)	Trauma	<i>CK</i> 1,270 (12-191 U/L; 0), <i>CRP</i> 12.4 (0-2.9 mg/L; 0), <i>D-dimer</i> 10.95 (0-0.5 ug/d; 0), ferritin 197 (22-275 ng/mL; 0)
United States	Data not available	Data not available

±Case previously published.

BNP=brain natriuretic peptide. CK=creatinase. COVID-19=coronavirus disease 2019.

CRP=C reactive protein. CSF=cerebral spinal fluid. ESR=erythrocyte sedimentation rate.

hr=hour. LDH=lactate dehydrogenase. MIS-C=multisystem inflammatory syndrome in children.

RBC=red blood cell. SARS-CoV-2=severe acute respiratory syndrome coronavirus. TLC=total leucocyte count. WBC=white blood cell.



STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No	Recommendation
<b>Title and abstract</b>	1	<p>(a) Indicate the study’s design with a commonly used term in the title or the abstract <b><i>The abstract states that this is a cohort study.</i></b></p> <p>(b) Provide in the abstract an informative and balanced summary of what was done and what was found <b><i>Abstract provides summary of what was done and results found.</i></b></p>
<b>Introduction</b>		
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported <b><i>Scientific background and rationale is contained in the introduction on page 5.</i></b>
Objectives	3	State specific objectives, including any prespecified hypotheses <b><i>Our specific objectives are contained at the end of the introduction on page 5. There were no prespecified hypotheses.</i></b>
<b>Methods</b>		
Study design	4	Present key elements of study design early in the paper <b><i>The key study design elements are presented early in the methods on pages 5 and 6.</i></b>
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection <b><i>The study setting, locations, dates, and other data collection information are contained on pages 5 and 6.</i></b>
Participants	6	<p>(a) <i>Cohort study</i>—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up <b><i>Information regarding the study sites that were selected to participate is contained on pages 5 and 6. Follow-up was not a subject of the study.</i></b></p> <p><i>Case-control study</i>—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls <b><i>Not applicable</i></b></p> <p><i>Cross-sectional study</i>—Give the eligibility criteria, and the sources and methods of selection of participants <b><i>Not applicable</i></b></p> <p>(b) <i>Cohort study</i>—For matched studies, give matching criteria and number of exposed and unexposed <b><i>Not applicable – no matching</i></b></p> <p><i>Case-control study</i>—For matched studies, give matching criteria and the number of controls per case <b><i>Not applicable</i></b></p>
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable <b><i>The methods section pages 5 and 6 include outcomes and exposures. Supplemental figures 1 and 2 are the survey and case report tools and include additional variable definitions.</i></b>
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group <b><i>The sources of data and details of assessment methods are found on pages 5 and 6 and in Supplemental figures 1 and 2.</i></b>
Bias	9	Describe any efforts to address potential sources of bias

*A panel of experts determined the contribution of the virus to the stroke, by discussion and consensus, thereby attempting to limit bias (page 6). The discussion examines how reliance on an expert panel may also be a limitation (page 10).*

Study size	10	Explain how the study size was arrived at <b><i>There was no sample size or power calculation for this study that reported frequencies.</i></b>
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why <b><i>There are no groupings. Variable analysis is included on page 6. The analyses include frequencies only and do not include quantitative variables.</i></b>
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding <b><i>Statistical methods are reported on page 6.</i></b> (b) Describe any methods used to examine subgroups and interactions <b><i>Not applicable</i></b> (c) Explain how missing data were addressed <b><i>The site participation rate is discussed on page 6. The missing descriptive data are discussed on page 7.</i></b> (d) <i>Cohort study</i> —If applicable, explain how loss to follow-up was addressed <b><i>This study does not include follow-up data. The missing data are discussed on page 7.</i></b> <i>Case-control study</i> —If applicable, explain how matching of cases and controls was addressed <b><i>Not applicable</i></b> <i>Cross-sectional study</i> —If applicable, describe analytical methods taking account of sampling strategy <b><i>Not applicable</i></b> (e) Describe any sensitivity analyses <b><i>There are no sensitivity analyses for this descriptive study.</i></b>

Continued on next page

<b>Results</b>		
Participants	13*	<p>(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed</p> <p><b><i>The information regarding the number of sites approached and the response rate is presented on page 6.</i></b></p> <hr/> <p>(b) Give reasons for non-participation at each stage</p> <p><b><i>Sites were invited to participate via survey. Non-responders did not express their reasons.</i></b></p> <hr/> <p>(c) Consider use of a flow diagram</p> <p><b><i>This study does not include a flow diagram.</i></b></p>
Descriptive data	14*	<p>(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders</p> <p><b><i>Study participant characteristics and additional information are found on pages 6 and 7 and in Supplemental tables 3 and 4.</i></b></p> <hr/> <p>(b) Indicate number of participants with missing data for each variable of interest</p> <p><b><i>There was missing information for one child which is described on page 7.</i></b></p> <hr/> <p>(c) <i>Cohort study</i>—Summarise follow-up time (eg, average and total amount)</p> <p><b><i>This study did not include follow-up information.</i></b></p>
Outcome data	15*	<p><i>Cohort study</i>—Report numbers of outcome events or summary measures over time</p> <p><b><i>Numbers of AIS cases and SARS-CoV-2 hospitalization numbers are included on pages 7 and 8.</i></b></p> <hr/> <p><i>Case-control study</i>—Report numbers in each exposure category, or summary measures of exposure <b><i>Not applicable</i></b></p> <hr/> <p><i>Cross-sectional study</i>—Report numbers of outcome events or summary measures <b><i>Not applicable</i></b></p>
Main results	16	<p>(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included</p> <p><b><i>Confidence intervals are presented for a main statistical analysis on page 8. This is a descriptive study, so no analyses with adjustment are presented.</i></b></p> <hr/> <p>(b) Report category boundaries when continuous variables were categorized <b><i>Not applicable</i></b></p> <hr/> <p>(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period <b><i>Not applicable</i></b></p>
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses <b><i>Not applicable</i></b>
<b>Discussion</b>		
Key results	18	Summarise key results with reference to study objectives
		<b><i>Key study results are summarized in the first paragraph of the discussion on page 8.</i></b>
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias
		<b><i>Limitations are discussed on page 10.</i></b>
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence
		<b><i>A cautious overall interpretation is present on page 11.</i></b>
Generalisability	21	Discuss the generalisability (external validity) of the study results
		<b><i>The inclusion of sites from over 20 countries is present on pages 6 and 8. On page 8, there is</i></b>

**Other information**

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Funding 22 Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based

*Information about funding (none) is contained on page 15.*

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at [www.strobe-statement.org](http://www.strobe-statement.org).