**Web-only tables**

**Web-only table 1.**  Angiographic stage of Moyamoya disease

|  |  |
| --- | --- |
| **Stage** | **Description** |
| 1 | narrowing of the carotid bifurcation (less than 50%) |
| 2 | progressive carotid stenosis (more than 50% ) with initial Moyamoya collaterals and dilatations of the ACA and MCA |
| 3 | dilatation and intensification of Moyamoya collaterals and partial disappearance of terminal segement of the ICA and proximal segment of the ACA and MCA |
| 4 | Advanced stenoocclusive changes in the ICA (ACA and MCA are traced very dimly or in a completely different shape) with thining of Moyamoya collaterals and posterior cerebral arteries |
| 5 | absence of the all cerebral vessels with further reduction of Moyamoya vessels, but subtle anterograde blood flow to the ACA and MCA branches through the basal moyamoya vessels remained |
| 6 | complete occlusion of the ICA and disappearance of all the ACA and MCA branches. Intracerebral vessels perfused only from the external carotid and/or vertebral arteries |

ACA, anterior cerebral artery; ICA, anterior cerebral artery; MCA, middle cerebral artery

**Web-only Table 2** The definition of infarct patterns in moyamoya disease

|  |  |
| --- | --- |
| **Pattern** | **Description** |
| Gyral | A fine thread or creeping worm-like lesion along the cortical gyrus, which is confined to the cortex. |
| Atypical territorial | A large infarction that is not matched to one classical vascular territory. |
| Honeycomb | Grouped and multiple shiver-like lesions located in the cortex and subcortex. |
| Classic territorial | A typical wedge-shaped infarct involving the major cerebral arterial territory. |
| Multiple- dot | Multiple small dot-like lesions scattered in one or more vascular territories of the cortex. |
| Borderzone | Infarction located in borderzone between two major arterial territories |
| Deep lacunar | A small infarction in the deep nuclei area |

**Web-only table 3** Angiographic stage of Moyamoya patients and stroke pattern

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Angiographic stage** | **Number** |  | **Stroke pattern** | | | | | | | | | | | | | | | | | | | |
|  | **Gyral** | |  | **Atypical territorial** | |  | **Honeycomb** | |  | **Classic territorial** | |  | **Multiple dot** | |  | **Borderzone** | |  | **Deep lacunar** | |
|  | **Yes** | **No** |  | **Yes** | **No** |  | **Yes** | **No** |  | **Yes** | **No** |  | **Yes** | **No** |  | **Yes** | **No** |  | **Yes** | **No** |
| 2,3 | 15 |  | 7 | 8 |  | 2 | 13 |  | 1 | 14 |  | 2 | 13 |  | 2 | 13 |  | 2 | 13 |  | 1 | 14 |
| 4 | 23 |  | 17 | 6 |  | 4 | 19 |  | 1 | 22 |  | 4 | 19 |  | 4 | 19 |  | 2 | 21 |  | 2 | 21 |
| 5 | 17 |  | 12 | 5 |  | 4 | 13 |  | 3 | 14 |  | 0 | 17 |  | 1 | 16 |  | 0 | 17 |  | 2 | 15 |
| 6 | 11 |  | 4 | 7 |  | 2 | 9 |  | 5 | 6 |  | 3 | 8 |  | 1 | 10 |  | 1 | 10 |  | 2 | 9 |
| Total | 66 |  | 40 | 26 |  | 12 | 54 |  | 10 | 56 |  | 9 | 57 |  | 8 | 58 |  | 5 | 61 |  | 7 | 59 |
| p value |  |  | 0.096 | |  | 0.902 | |  | 0.012 | |  | 0.195 | |  | 0.721 | |  | 0.536 | |  | 0.795 | |