

Table S1. The relationship among symptoms associated with headache and the potentially dangerous conditions divided by etiology.

| Symptoms | Cerebral neoplasm n=15 (%) | Vascular disease n=3 (%) | Inflammatory disorder n=9 (%) | Intracranial Hypertension n=5 (%) | Cerebral malformation n=2 (%) |
|--|-------------------------------|-----------------------------|----------------------------------|--------------------------------------|----------------------------------|
| History of headache | 4 (26.7) | 0 | 1 (11.1) | 3 (60) | 1 (50) |
| Fever | 0 | 2 (66.7) | 6 (66.7) | 0 | 0 |
| Vomiting | 13 (86.7) | 1 (33.3) | 8 (88.9) | 1 (20) | 2 (100) |
| Papilledema | 2 (13.33) | 0 | 0 | 3 (60) | 0 |
| Nystagmus | 3 (20) | 0 | 0 | 0 | 0 |
| Ataxia | 8 (53.33) | 0 | 3 (33.3) | 0 | 0 |
| Disturbance of ocular motility | 2 (13.33) | 0 | 1 (11.1) | 1(20) | 0 |
| Torticollis | 0 | 0 | 0 | 0 | 0 |
| Disturbance of consciousness | 5 (33.3) | 1 (33.3) | 4 (44.4) | 2 (40) | 0 |
| Dizziness | 1 (6.7) | 1 (33.3) | 2 (22.2) | 0 | 0 |
| Paralysis of cranial nerves | 3 (20) | 0 | 1 (11.1) | 0 | 0 |
| Nocturnal awakening | 9 (60) | 2 (66.7) | 3 (33.3) | 1 (20) | 0 |
| Asthenia | 3 (20) | 1 (33.3) | 3 (33.3) | 0 | 0 |
| Occipital localization (headache) | 1 (6.7) | 0 | 2 (22.2) | 0 | 1 (50) |
| Presence of neurological symptoms or/and signs | 9 (60) | 2 (66.7) | 7 (77.8) | 5 (100) | 0 |

Table S2. Clinical characteristics of the 15 children with cerebral neoplasm on 34 with potentially urgent intracranial conditions

| Pts n. | Papilledema | Vomiting | Nystagmus | Ataxia | Ocular motility disorder | Disturbances of consciousness | Paralysis of cranial nerves | Vertigo | Nocturnal awakening | Occipital pain localization | Asthenia | Presence of neurological symptoms or/and signs |
|--------|-------------|----------|-----------|--------|--------------------------|-------------------------------|-----------------------------|---------|---------------------|-----------------------------|----------|--|
| 1 | | * | * | | | | * | | * | | | * |
| 2 | * | * | | | * | | * | | * | | | * |
| 3 | | * | | | | | | | * | | | |
| 4 | | * | | | | | | | * | | | |
| 5 | | * | | * | | * | | | | * | * | * |
| 6 | | * | | | | * | | | | | * | * |
| 7 | | * | | * | | * | | | | | * | * |
| 8 | | * | | * | | | | * | * | | | * |
| 9 | | * | | | | | | | | | | |
| 10 | | | | | | | | | * | | | |
| 11 | | * | * | * | | * | | | | | | * |
| 12 | | | * | * | * | | | | | | | |
| 13 | | * | | * | | | * | | * | | | * |
| 14 | * | * | | * | | * | | | * | | | * |
| 15 | | * | | * | | | | | * | | | |

* Presence of sign/symptom

Table S3. Clinical characteristics of the 3 children with vascular disease on 34 with potentially urgent intracranial conditions

| Pts n. | Fever | Papilledema | Vomiting | Ataxia | Ocular motility disorder | Disturbances of consciousness | Paralysis of cranial nerves | Vertigo | Nocturnal awakening | Occipital pain localization | Asthenia | Presence of neurological symptoms or/and signs |
|--------|-------|-------------|----------|--------|--------------------------|-------------------------------|-----------------------------|---------|---------------------|-----------------------------|----------|--|
| 1 | * | | | | | | | | * | | | |
| 2 | * | | | | | | | * | * | | | * |
| 3 | | | * | | | * | | | | | | * |

* Presence of sign/symptom

Table S4. Clinical characteristics of the 9 children with inflammatory disease on 34 with potentially urgent intracranial conditions

| Pts n. | Fever | Papilledema | Vomiting | Ataxia | Ocular motility disorder | Disturbances of consciousness | Paralysis of cranial nerves | Vertigo | Nocturnal awakening | Occipital pain localization | Asthenia | Presence of neurological symptoms or/and signs |
|--------|-------|-------------|----------|--------|--------------------------|-------------------------------|-----------------------------|---------|---------------------|-----------------------------|----------|--|
| 1 | | | * | | | | | | * | | | * |
| 2 | * | | * | | * | * | * | | * | | * | * |
| 3 | * | | * | * | | * | | | | | * | * |
| 4 | * | | * | | | * | | * | | | * | * |
| 5 | | | * | * | | * | | * | | * | | * |
| 6 | * | | * | | | | | | * | * | | |
| 7 | | | * | * | | | | | | | | * |
| 8 | * | | * | | | | | | | | | * |
| 9 | * | | | | | | | | | | | |

* Presence of sign/symptom

Table S5. Clinical characteristics of the 5 children with intracranial hypertension on 34 with potentially urgent intracranial conditions

| Pts n. | Fever | Papilledema | Vomiting | Ataxia | Ocular motility disorder | Disturbances of consciousness | Paralysis of cranial nerves | Vertigo | Nocturnal awakening | Occipital pain localization | Asthenia | Presence of neurological symptoms or/and signs |
|--------|-------|-------------|----------|--------|--------------------------|-------------------------------|-----------------------------|---------|---------------------|-----------------------------|----------|--|
| 1 | | | * | | | * | | | | | | * |
| 2 | | * | | | | | | | * | | | * |
| 3 | | * | | | | | | | | | | * |
| 4 | | * | | | | | | | | | | * |
| 5 | | | | | * | * | | | | | | * |

* Presence of sign/symptom

Table S6. Clinical characteristics of the 2 children with cerebral malformation on 34 with potentially urgent intracranial conditions

| Pts n. | Fever | Papilledema | Vomiting | Ataxia | Ocular motility disorder | Disturbances of consciousness | Paralysis of cranial nerves | Vertigo | Nocturnal awakening | Occipital pain localization | Asthenia | Presence of neurological symptoms or/and signs |
|--------|-------|-------------|----------|--------|--------------------------|-------------------------------|-----------------------------|---------|---------------------|-----------------------------|----------|--|
| 1 | | | * | | | | | | * | | | |
| 2 | | | * | | | | | | * | | | |

* Presence of sign/symptom