<table>
<thead>
<tr>
<th>Demography</th>
<th>Any age, often younger</th>
<th>Older patients. They usually have stroke risk factors. More common in men</th>
<th>Younger age, More common in women</th>
<th>Any age, usually younger More common in women</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNS symptoms</td>
<td>Positive symptoms: limb jerking, head turning, LOC Negative symptoms may develop and persist post-ictally</td>
<td>Negative symptoms: numbness, visual loss, paralysis, ataxia. Multiple deficits</td>
<td>First positive symptoms and then negative. E.g. somatoma followed by parasthesia</td>
<td>Light headed, dim vision, decreased alertness. Transient loss of consciousness</td>
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<tr>
<td>Timing</td>
<td>20-60 seconds. Absence seizures, atonic seizures and myoclonic jerks are shorter. There may be post-ictal depression.</td>
<td>Usually minutes, most &gt;1hr Can have recurrent spells over months or days</td>
<td>20-30 mins Sporadic attacks over years</td>
<td>Few seconds, sporadic attacks over years</td>
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<tr>
<td>Associated symptoms</td>
<td>Tongue biting, incontinence and sore muscles/ headache after</td>
<td>Headaches may occur during TIA</td>
<td>Headache after, nausea, vomiting, photophobia</td>
<td>Sweating, pallor, nausea</td>
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</tbody>
</table>

**Brain tumours** – 5% have a stroke like presentation as sometimes there can be haemorrhage into the lesion. You can also get compression of vascular structures or obstructive hydrocephalus. Seizures can also be present, causing Todd’s paresis (where the seizing part of the body becomes tired and weak after due to all the muscle contractions).

**Functional disorders** – hoover’s sign is a test for if this is a functional disorder. Get the person to sit on a chair and lift one leg. At the same time try and push up their other leg without telling them. Unconsciously they will push down to keep their balance, proving the paralysis is functional.

**Cerebrovascular disease** – “a clinical syndrome consisting of rapidly appearing clinical signs of focal disturbance of cerebral function lasting >24hrs or leading to death with no apparent cause other than vascular origin.”

**TIA** – “neurological dysfunction caused by focal brain ischaemia with clinical symptoms lasting less that 1 hour and without evidence of acute infarction.”
In a posterior cerebral artery stroke the patient will experience homonymous hemianopia (loss of half the field of view on the same side of both eyes) and alexia without agraphia (patients can still write but are unable to read).

Common confusions:

- Bilateral thalamic stroke → persistent acute global amnesia
- Limb shaking TIA → focal epilepsy
- Cortical stroke → peripheral nerve lesion
- Bilateral occipital stroke → confusion/delirium

Epilepsy:

Epilepsy is recurrent tendency to spontaneous seizures. Seizures are due to abnormal electrical activity in the brain. Convulsions are the motor signs of a seizure.

It can be classified into primary generalised (when the electrical activity starts in both hemispheres) or partial (when it starts in a focal part of the brain).

The features of a partial seizure depend on the location (e.g. temporal lobe epilepsy). In secondary generalised epilepsy the focal symptoms may precede the generalised seizure and are called ‘auras’.

Focal seizures are most apparent from the post seizure symptoms. Unilateral weakness (Todd’s palsy) indicates a focal motor cause. A space occupying lesion should be excluded by MRI in these cases.

- Reflex anoxic seizures – look like tonic clonic. There are minimal warning signs and symptoms of cerebral hypoperfusion.
- Low BP – LOOK FOR CARDIAC CAUSES