



A patient guide to post-traumatic amnesia

What is post-traumatic amnesia?

In the period immediately after a traumatic brain injury, some people may suffer from post-traumatic amnesia (PTA).

PTA is a period of initial confusion but also includes any period of time the person is unconscious or in a medicated coma.

When a head injury is sustained, changes may occur in the brain. Neurons (nerves) can be stretched, swollen and damaged. Neurotransmitters are the chemicals which allow the electrical impulses in our brains to work; these can also be disrupted. In a mild traumatic brain injury (MTBI) these are usually temporary and wear off after a few months. In severe cases the effects will last much longer.

How do you know if someone is in PTA?

A person who is in PTA may experience the following:

- **Disorientation:** not knowing the year, month or day of the week or where they are
- **Agitation:** due to the blow to the head or because they do not understand what is going on or why they are being kept in hospital

It is also important to note that people may be confused or unresponsive for other reasons:

- They may be unresponsive due to sedation
- Confused because of other medications such as morphine for pain relief
- Confused if they have a high temperature or an infection

A key feature of PTA is problems remembering new information from moment to moment and day-to-day (amnesia).

Patients may forget things that they have been told, or visitors that they have had.

It is very common for people to remember nothing of the event surrounding the initial head injury. It is important to remember that PTA is a temporary stage in the recovery from a brain injury and does not mean that this is how the person is going to remain.

In many cases, people can show quite a quick improvement in abilities as they emerge from PTA.

Why is the duration of PTA important?

The length of time that people remain in PTA can vary from hours to months.

The duration of PTA is used as an indicator to understand how serious a head injury is. The longer a person remains in PTA, the more severe the head injury.

The duration of PTA is the time of the loss of consciousness experienced by the patient to the full recovery of continuous events.

Information for Patients

Recovery from PTA

Typically, people become more familiar to facts about themselves than where they are, but there is great variation between individuals.

Orientation tends to return before full continuous memory, but again this is not always the case. In terms of memory, people will often not remember the accident or head injury and will have no, or patchy, memory for events since.

Over time, the person will be able to create 'islands' of memory but their recall of new, day-to-day events may be patchy.

Gradually these islands of memory 'join up' until the person has continuous memory for events once more. It is important to note that when coming out of PTA, the person will recover the ability to produce new memories but will not recover memories from the period of PTA.

Coping with a relative in PTA

During post-traumatic amnesia, a person can be confused, disoriented, agitated and may behave unusually. It is not uncommon for people to be uncharacteristically aggressive or to do inappropriate things.

It is also possible that a person will take longer to respond to stimuli (something that causes a reaction), be unable to pay attention or concentrate. For this reason, people in PTA are not to be discharged from hospital without very close supervision, as they would be at risk, for example when crossing the road or operating machinery.

Those experiencing PTA may need frequent breaks in interactions, even with relatives. They may be sensitive to noise, light or being around too many people.

Furthermore, they may be argumentative, failing to understand why they need to remain in hospital, trying to move even if injured or repetitively asking about the same things.

This may be very challenging for the patient's family. However, the patient may believe and respond to what their loved ones say more than they will to professionals.

Family contact is important but it is important to consider the following:

- Limit the number of people at the bedside to one or two so that your relative/friend does not get overwhelmed
- It is important not to put undue pressure on your relative to remember things as this will not aid recovery
- If the patient says something inappropriate, it is okay to prompt them about this but avoid getting into arguments
- Give the person frequent breaks (10 mins on, 30 mins off)
- Remind the person of where they are and why they are there (if this is not too distressing)
- PTA is temporary so patience is required to let recovery take its own course
- Medication may be prescribed in the short-term to calm down patients if they become too agitated or aggressive
- Written information or family pictures by the side of the bed can be helpful to familiarize the person
- Do not feel you have to be present all the time. Patients often forget who has been present. It is important to look after yourself, eat well and get plenty of rest. Your help will be needed more in the later stages of recovery
- Lack of sleep could put you at risk driving too and from the hospital

Information for Patients

Contact number

Head Injury Clinical Nurse Specialist: **0121 371 4243**

Please use the space below to write down any questions you may have and bring this with you to your next appointment.

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