POST TRAUMATIC AMNESIA (PTA) TESTING - PROTOCOL FOR

<table>
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<tr>
<th>Cross References (including NSW Health/SESLHD policy directives)</th>
<th>SGSHHS CLIN Emerg Dept Abbreviated Post Traumatic Amnesia (A-WPTAs) Scale Testing in the Emergency Department - Protocol for Abbreviated Westmead</th>
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1. What it is

Evidence based guidelines for the testing of patients with a closed head injury which is common in the physical trauma population. Post traumatic amnesia (PTA) represents a stage of recovery post head injury during which a person’s ability to make new memories for daily events is impaired. PTA testing is an essential form of monitoring the patient’s mental state and behavioural disturbances. The duration of PTA is also used as an index of severity for prognosis, referral to rehabilitation services and medico-legal and scientific purposes.

2. Risk Rating

Medium

3. Employees it Applies to

Trauma team; Neurosurgical team; Rehabilitation team; Occupational Therapy; Nursing staff caring for patient with a closed head injury, Neuropsychology

Background

Post traumatic amnesia (PTA) ‘is the period of time during which a person is disorientated or confused and unable to recall new information following a head injury’.

The Westmead PTA Scale

The Westmead PTA Scale is a standardised assessment tool designed to provide an objective prospective measure of PTA. The test consists of 12 questions, 7 assessing orientation and 5 assessing memory.

The Westmead PTA Scale was designed for patients with a closed head injury. Patients with a head injury caused by penetrating/missile trauma, hypoxia or stroke are excluded from testing, as these patients were not included in the studies when the test was designed.

Importance of PTA testing

- PTA testing allows for monitoring of the patient’s mental state and behavioural disturbances common when in PTA. This also assists to increase staff awareness and understanding of PTA
- The duration of PTA is used as an index of severity for prognosis, medico-legal and scientific purposes

Approved by: Clinical Document Governance Committee    Date: September 2015    Page 1 of 6
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4. Process

Note: PTA testing begins when the patient has regained consciousness and can communicate intelligibly. The patient may be able to communicate via speech, writing, pointing to printed answers or by indicating “yes” or “no” when prompted.

4.1 Inclusion Criteria:
Following the initial stabilisation of blunt head injury patients who require admission. Patients must meet one or more of the following criteria:
- Reported amnesia or patchy recall of the events
- Loss of consciousness at the scene
- Glasgow Coma Scale <15 at the scene
- Evidence of a head injury on a cerebral CT

4.2 Exclusion Criteria:
- Patients aged > 70 years with pre-existing cognitive impairments e.g. dementia. If the patient has no history of cognitive impairment, they may complete PTA testing. This is especially important for patients who might be eligible for entry into the Lifetime Care and Support Scheme
- Patients aged < 7 years
- Patients with open head injuries
- Patients with a head injury caused by hypoxia or stroke

4.3 Collect the tools required for testing: 9 picture cards (fig. 1), 1 score sheet (fig. 2), 3 x photos of Occupational Therapists, Quiet environment (minimise distractions e.g. turn off the television, ask family members to wait outside and pull the curtains).

4.4 Be aware of the expected answers e.g. patient’s age, D.O.B, day, time, etc

4.5 The first day of testing requires you to ask the first 7 orientation questions only. Tell the patient if they are right or wrong and correct any incorrect answers. Three prompts can be provided for each question if the patient appears to be having difficulties providing a response. Note- these prompts must be consecutive e.g. “Is it Monday, Tuesday or Wednesday”.

4.6 Show the patient 3 x picture cards (from fig. 1) to remember for the following day.
4.7 Show one photo and ask the patient to remember the face and name for the following day (the name of the therapist is located on the back of the photo).
4.8 Rehearse the cards, name and face a few minutes after testing. Circle the cards shown and record the name of the therapist in the appropriate section on the score sheet. Repeat the process the following day.
4.9 Subsequent days of testing: requires you to ask all 12 questions. Provide the patient with the three photos and ask them to identify the face and name of the person they were to remember.
4.10 Ask the patient to recall the 3 picture cards that were also shown on the previous day. If they are unable to do so, offer the patient the 9 cards and ask them to identify the three they were to remember.
4.11 If the patient scores 12/12, change the cards for the following day. Record the date and circle the new cards on the score sheet for reference the next day.
4.12 If the patient scores less than 12/12, the cards are to remain the same for re-testing the following day. Remind the patient what the cards will be and rehearse this with them.
4.13 **Scoring the results:** Record each answer and score 0 for an incorrect answer or 1 for a correct answer on the PTA score sheet. Add the individual scores to give a total score out of 7 on the first day and 12 on subsequent days. If the patient required prompts, mark an asterisk in the score section e.g. 1* or 0*

4.14 Document the results in the patient’s file. When documenting the final PTA entry the length of PTA duration must be recorded in the patient’s progress notes. This is from the date of injury to the date the first of 3 consecutive 12/12 scores were achieved.

4.15 **Note:** Once the patient has received 28 days of continuous PTA testing they will no longer be required to achieve 3 consecutive days of 12/12 scores. The goal will then be to achieve one day only of 12/12 score. Such a patient must be referred to the rehabilitation team and liaison made with Brain Injury Services.

4.16 The Occupational therapist also provides written and verbal education to the patient and family members regarding the side effects and precautions post head injury. If concerns arise post discharge, family members are advised to return to ED or see their GP for a review.

4.17 To determine if a patient is medically ready for discharge from PTA prior to scoring consecutive 12/12 a neuropsychology assessment is recommended. If neuropsychologist assessment is unavailable, PTA testing can be halted by senior medical staff at their discretion and patients may be discharged by senior medical personnel when deemed appropriate prior to achieving 2 scores of 12/12. This must be clearly documented in the patient’s notes.
# Clinical Business Rule

## 5. Keywords
Post Traumatic Amnesia Testing, PTA

## 6. Functional Group
Trauma Service

## 7. External References

## 8. Consumer Advisory Group (CAG) approval of patient information brochure (or related material)
N/A

## 9. Implementation and Evaluation Plan
Revised document will be published on the SGSHHS Clinical Business Rules page and communicated by the CPIU Clinical Governance Document report.

## 10. Knowledge Evaluation

Q1. Name the 4 essential criteria that blunt head injury patients must meet at least 1 of to qualify for PTA testing?
   **Answer:**
   1. Reported amnesia or patchy recall of the events
   2. Loss of consciousness at the scene
   3. Glasgow Coma Scale <15 at the scene
   4. Evidence of a head injury on a cerebral CT

Q2. Prior to 28 days, how many consecutive scores of 12/12 are needed before the patient is deemed out of PTA?
   **Answer:** 3 days

Q3. When should the picture cards be changed?
   **Answer:** Daily if the patient has scored 12/12 otherwise they should not be changed.

## 11. Who is Responsible
Senior medical staff caring for the patient
Director of Clinical Services
Director of Nursing

**NOTE:** PTA testing can be halted by senior medical staff at their discretion and patients may be discharged by senior medical personnel when deemed appropriate prior to achieving 3 scores of 12/12.
### Approval for
**POST TRAUMATIC AMNESIA (PTA) TESTING - PROTOCOL FOR**

| *Nursing/Midwifery Co-Director | Name/position: Christine Day, A/NCD Surgery  
Date: 16.09.2015 |
|-------------------------------|--------------------------------------------------|
| Executive Sponsor             | Name/Position: Andrew Bridgeman, CGM Surgery  
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### Revision and Approval History

<table>
<thead>
<tr>
<th>Date</th>
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<th>Author (Position)</th>
<th>Revision due</th>
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<tr>
<td>Sept 2011</td>
<td>0</td>
<td>Taneal Wiseman, CNC Trauma, SGH</td>
<td>Sept 2014</td>
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### General Manager’s Ratification

Name: Leisa Rathborne  
Date: 16.10.15