Post Traumatic Amnesia Protocol: An Interdisciplinary Approach in the Acute Rehab Setting

MossRehab Einstein Healthcare Network
Elizabeth Marcy PT, DPT, NCS
Stephanie Farm MS, OTR/L,CBIS
Deb Presutti, MA, CCC-SLP

Objectives

Participant will be able to:

- Discuss what Post Traumatic Amnesia (PTA) means
- Understand 2 DO's and 2 DON'Ts when talking to persons in a state of PTA
- Identify appropriate communication strategies in place of questions when speaking with people in PTA

MossRehab
Physical Medicine & Rehabilitation

What is PTA?

- Post-Traumatic Amnesia (PTA): a state of confusion brought on by physical and chemical changes in the brain after a traumatic brain injury (TBI)
  - Term first used by Symonds in 1940 noting the period of time from initial injury through full return of memory
  - Can follow a period of coma or a minimally conscious state (MCS)

Differential Diagnosis

- Delirium
- Confusion
- Post Traumatic Confusional State
- Psychiatric Disorders

Key Features

- Occurs after a traumatic brain injury (TBI)
- Disorientation
- Confusion
- Retrograde Amnesia
- Anterograde Amnesia**
- Inability to store new memories of ongoing events
- Possible agitation, distress, and/or anxiety

Memory and PTA

- Severely **defective *explicit memory*** systems
  - Disoriented to time, place, circumstances
  - Cannot consciously recall events from day to day

- Grossly **intact *implicit memory*** systems
  - Can learn procedures, routines, habits
  - Can condition emotional responses (approach/ avoidance)

MossRehab
EINSTEIN HEALTHCARE NETWORK

Why are memory and learning impaired in PTA?

- There is growing evidence that there are multiple brain systems for learning and memory.
- Different systems are anatomically distinct and specialize in handling different kinds of information.
- Although systems work together under normal conditions, they may also dissociate in memory disorders (including PTA).

Prognostic Value of PTA

- Provides important information about outcome and recovery
- Duration of PTA
  - Best "early" predictor of TBI outcome, cognitive outcome
  - *>2 weeks of PTA predictive of less favorable outcomes*

Severity	PTA
Very mild	< 5 minutes
Mild	5–60 minutes
Moderate	1–24 hours
Severe	1–7 days
Very severe	1–4 weeks
Extremely severe	> 4 weeks

Impact on Rehab

Better understanding PTA can enable care providers to:

- Communicate more effectively with persons in PTA
- Provide reassurance to persons who are confused
- Improve treatment participation
- Use appropriate resources to obtain accurate information

Typical Presentation

- Individuals in PTA may have impaired:
  - Orientation: Not aware of where they are, the day of the week, or why they are in the hospital
  - Memory: Not able to remember events that happened recently
  - Sleep/wake cycles
  - Behavior: Become easily upset and out of sorts, experience agitation

Typical Presentation

- **Confabulation**
  - Persons in PTA may not remember the event you're asking about and may 'make up' what they think is a reasonable answer. It could be prompted by a recent headline they saw, or a conversation they overheard.
  - This is not an attempt to lie or deceive. They simply are mixing up different pieces of information (some real, some not).
  - Interviewing a person in PTA is not an effective way to gather historical information.

Impact on Care

- People may get **distressed** when they don't know the answer to seemingly obvious questions
- Encouraging explicit recall (factual knowledge) may actually **reinforce false memories and prompt incorrect procedures**
- People are often **frustrated** by a barrage of questions which may affect participation and rapport
- They may not remember what you say, but they may remember how **they feel**

Staff will get unreliable, potentially inaccurate information that will affect clinical decisions.

MossRehab Memory Work Group

- Identified opportunity to enhance care delivery to patients with memory impairment
- Interdisciplinary Work Group established and met regularly > 1 year
  - Literature Review
  - Visiting Scholor Consultation (Dr. Lyn Turkstra)
  - Assessment of current state
  - Developing a protocol
  - Developed and delivered staff education
  - Ongoing assessment of impact, modifying protocol as needed, maintaining compliance

Comprehensive Team Approach

- Educating All Care Providers

- Initial rollout of PTA Protocol included all staff that interact with patients in PTA:
  - Nursing, Physicians, Social Worker, Therapists
  - Dietary, Housekeeping, Unit Clerk
  - Consultants

- Nursing and Clinical Staff providing education to family members and visitors

Patient Inclusion in the PTA Protocol

- Speech Therapists use the O-Log, a tool designed for the rehab setting
- The Orientation Log (O-Log) asks questions addressing: Place, Time and Situation (circumstances)
- Patients who score < 25 are deemed to be in a state of PTA and placed on the PTA Protocol
- Patients on the protocol are tested at least every 48 hours
- If the scores are >25 twice in a row the patient may be considered to have emerged from PTA.
  - Occasionally a patient will be oriented by assessment but remain confused.

Team Communication

PTA Protocol Sign

Posted above the bed and on the wheelchair:

PTA PROTOCOL:

- Introduce yourself on every encounter – state your purpose
- Do not quiz the patient – provide the info using the Reference Log
- Expect the need to repeat information

MossRehab
Physical Medicine & Rehabilitation

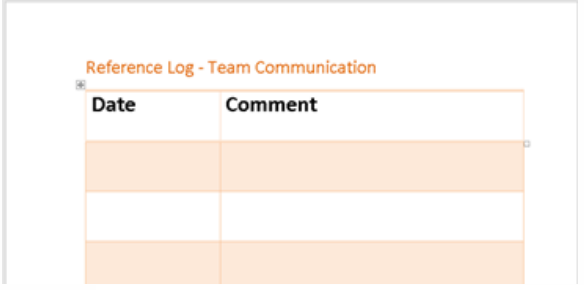
- **Do** introduce yourself; state your name and purpose
- **Do** provide information
- **Do** focus questions on the here and now
- Keep it **simple**

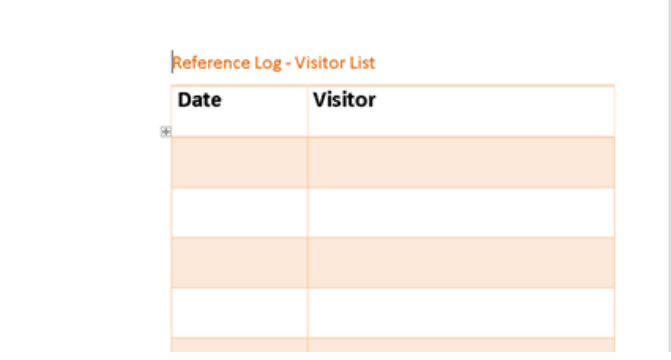
- **Don't** assume they remember you
- **Don't** ask the individual to recall information
- **Don't** quiz

The Reference Log

PAGE

1) **INFO** for orientation
   completed by speech therapist
2) **ME** page
   info on patient, to be completed by the neuropsychology/social work team
3) **TEAM** pictures
   discipline descriptions
4) **CALENDAR**
   Two months
5) **Team COMMUNICATION**
6) **VISITOR List**





Treatment Team Considerations: The Do's

- **Do** establish habits and routines
  - Same sequence, same way each time
- **Do** help them avoid making errors
  - modeling, step by step prompting
- **Do** evaluate their learning by what they do, not by what they say

MossRehab
EINSTEIN HEALTHCARE NETWORK

Treatment Team Considerations: The Don'ts

- **Don't** quiz them for explicit information
- **Don't** use lengthy verbal explanations
- **Don't** expect them to remember what they've been told
- **Don't** encourage them to "guess" or "try" after a failed verbal or physical response

Treatment Considerations for a Person in a state of PTA

- Provide information
- Provide consistent caregivers whenever possible
- Create a routine – maintain a similar daily schedule
- Provide frequent reassurance
- Avoid overstimulation
- Have consistent staff working with the patient
- Avoid restraints

LET'S PRACTICE!

MossRehab
Physical Medicine & Rehabilitation

What Did We Do Wrong?

MossRehab
Physical Medicine & Rehabilitation

What Did We Do Right?

MossRehab
Physical Medicine & Rehabilitation

Why Are You Asking That Question?

- Assessment
  - Ask orientation questions on your initial evaluation, but please do NOT repeat these questions daily. Instead, **provide** the information.
  - It is not helpful to have EVERYONE assessing orientation on a routine basis. Identify who will assess and other team members provide orientation support.
    - Our Protocol: ONLY Speech therapy completes daily orientation questions for patients in PTA.

MossRehab
Physical Medicine & Rehabilitation

Why Are You Asking That Question?

- Treatment
  - Team members utilize the reference log to learn information about the patient. This will reduce the need to ask questions **requiring recall**.
  - Keep questions in the “here and now” and track progress via performance.

MossRehab
Physical Medicine & Rehabilitation

Why Are You Asking That Question?

Assessment of

- Orientation
  - speech therapy will assess

- Learning (to determine progress)
  - ***Observe more; Talk less***
    - Look for signs of procedural learning
    - Familiarity with therapist
    - Familiarity with hospital
    - Familiarity/mastery of routine

MossRehab
Physical Medicine & Rehabilitation

Why Are You Asking That Question?

- **State of being** – keep questions in the HERE & NOW:
  - Are you in pain?
  - Are you comfortable?
  - Are you hungry? Are you cold?

  Think about their reliability of yes/no and strategies to confirm that (reverse question, physical presentation)

- **Change in medical status** –
  - Observe changes in physical presentation
  - Observe changes in performance
  - Vital signs

MossRehab
Physical Medicine & Rehabilitation

Why Are You Asking That Question?

- **To gather course of care information**
  - Use alternative sources
    - Medical record
    - Reference Log daily entries
    - Family members
    - Team communications

MossRehab
Physical Medicine & Rehabilitation

Why Are You Asking That Question?

- Rapport Building
  - Use ME information provided in reference log and build on that info
  - Observe the patient's comfort/discomfort with the interaction
  - Stay away from biographical questions since they may not be helpful
  - It would be better to interact without questions. This may require you to plan ahead with regard to the topics you want to cover

MossRehab
Physical Medicine & Rehabilitation

DO'S & DON'TS

Do introduce yourself; state your name and purpose
Do provide information
Do focus questions on the here and now
Do establish habits and routines
Same sequence, same way each time
Do help them avoid making errors by modeling, step by step prompting
Do evaluate their learning by what they do, not by what they say

Don't assume they remember you
Don't ask the individual to recall information
Don't quiz them for explicit information
Don't use lengthy verbal explanations
Don't expect them to remember what they've been told
Don't encourage them to "guess" or "try" after a failed verbal or physical attempt

MossRehab
Physical Medicine & Rehabilitation

Authors & References

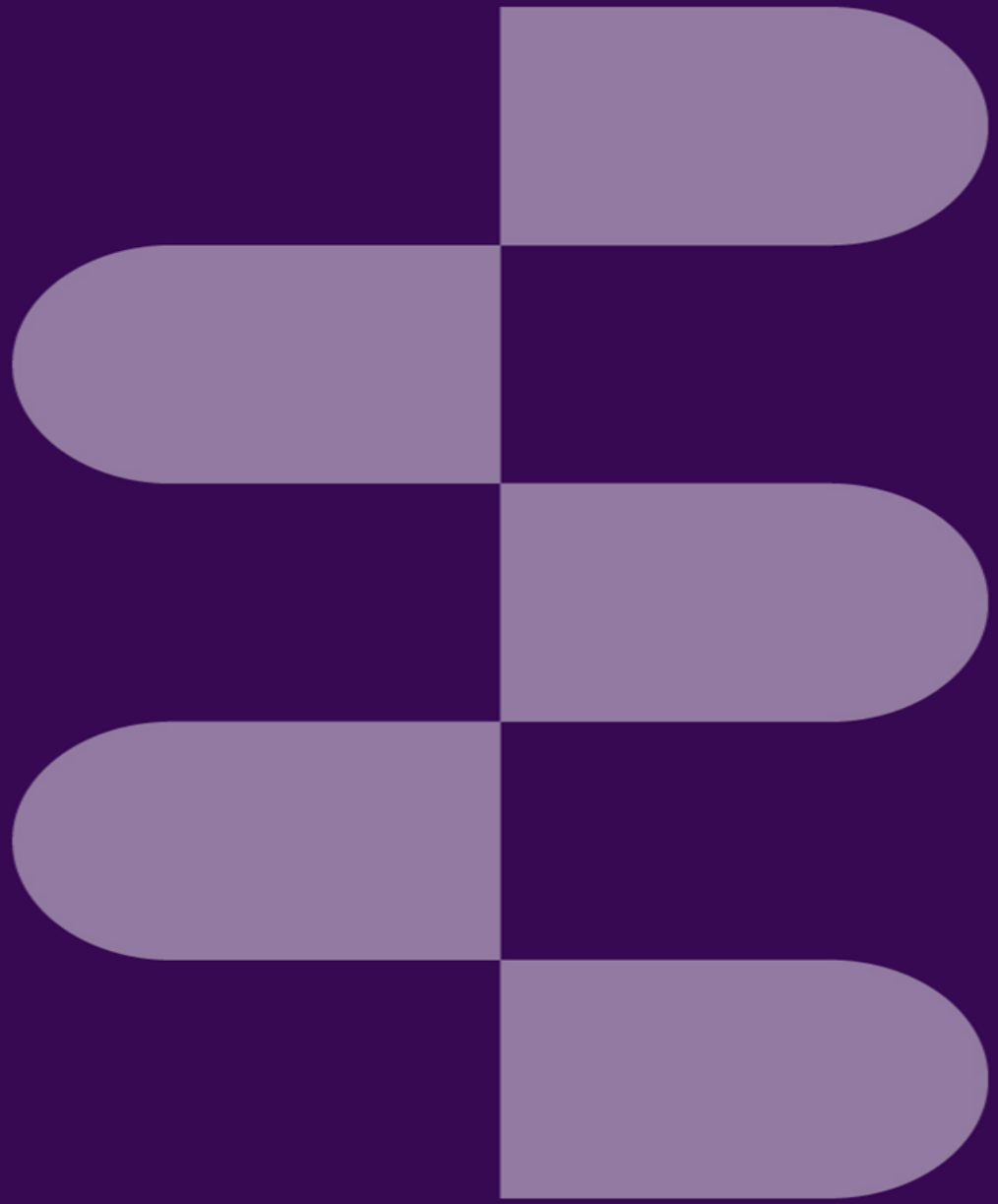
- Slide Contributions by a MossRehab Inpatient Brain Injury Center Work Group comprised of: Nicole Bongart, Stephanie Farm, Eileen Fitzpatrick deSalme, Elizabeth Marcy, Lisa Pinder, Deb Presutti, Amanda Rabinowitz and Mary Ferraro.
- Consultants: Tessa Hart, PhD, and Lyn Turkstra, PhD, CCC-SLP

Related Literature:

- Bayley M, Tate RL, Douglas JM, et al. INCOG guidelines for cognitive rehabilitation following TBI: methods and overview. J Head Trauma Rehabil. 2014;29(4):290–306.
- Hannay HJ, Howieson DB, Loring DW, Fischer JS, Lezak MD (2004). "Neuropathology for neuropsychologists". In Lezak MD, Howieson DB, Loring DW (eds.). *Neuropsychological Assessment*. Oxford [Oxfordshire]: Oxford University Press. p. 160. ISBN 978-0-19-511121-7.
- Novack, T. (2000). The Orientation Log. *The Center for Outcome Measurement in Brain Injury.* http://www.tbims.org/combi/olog.
- Ponsford, J. et al., 2014. INCOG recommendations for management of cognition following TBI, Part I: Posttraumatic amnesia/delirium, Journal of Head Trauma Rehabilitation, 29, 4, 307.
- Sohlberg, M. & Turkstra, L. (2011). Optimizing Cognitive Rehabilitation: Effective Instructional Methods. New York: Guilford Press.
- Symonds CP. Concussion and contusion of the brain and their sequelae. In: Brock S, ed. Injuries of the Skull, Brain and Spinal Cord: Neuro-Psychiatric, Surgical, andMedico-Legal Aspects. London, UK: Bailliere, Tindall and Cox; 1940:69–111.
- Trevena-Peters, J.et al. 2018. Efficacy of activities of daily living retraining during posttraumatic amnesia: A randomized controlled trial. Archives of Physical Medicine and Rehabilitation, 99, 2, 329.

MossRehab
EINSTEIN HEALTHCARE NETWORK

Questions?



THANK YOU!