Courage Kenny Rehabilitation Institute

Turning the Lights Off to Turn the Brain Back On: From Agitation-Induced Assault to Independence

Presented by:

- Abi Daramola, MBA, RN, CRRN
- Heidi Menard, MA, RN, NE-BC

Minnesota Brain Injury Alliance Conference

April 25th, 2024

Allina Health

Types of Brain Injuries

Traumatic

Definition: Traumatic Brain Injuries (TBIs) are caused by a forceful bump, blow, or jolt to the head or body, or from an object that pierces the skull and enters the brain

- Diffuse Axonal Injury (widespread shearing of nerve connections caused by movement of the brain within the skull. Most common form but when severe also most deadly)
- Concussion (Sometimes called “mild brain injury”)
- Hematoma (swelling or mass of blood between brain and skull)
- Coup-contrecoup injury (caused by acceleration-deceleration forces)
- Second impact syndrome (second brain injury occurs before healing has commenced from initial brain injury)

Types of Brain Injuries

Non-traumatic

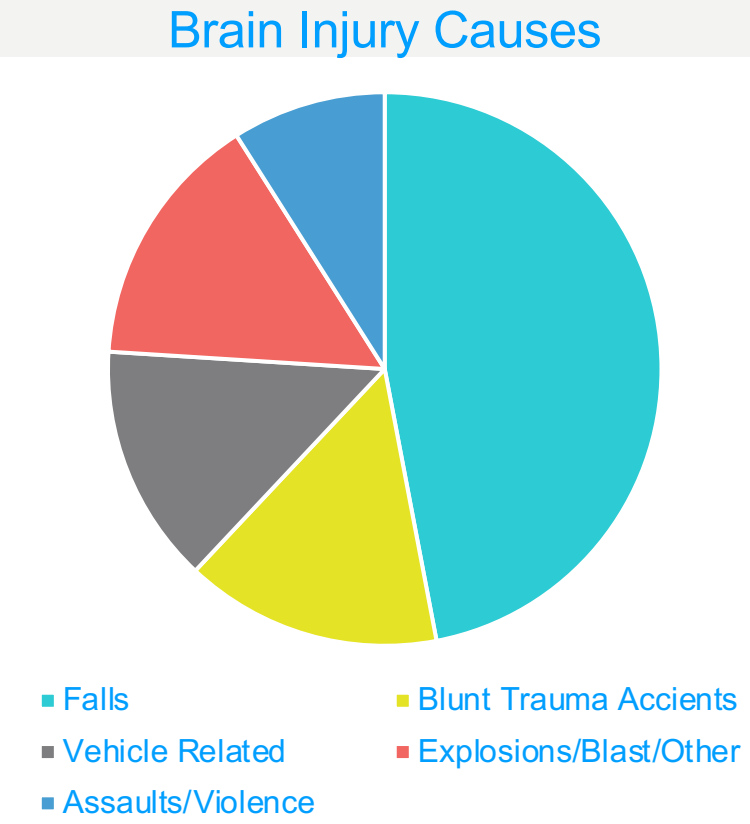
Definition: Injuries to the brain that are not caused by an external physical force to the head

- Hypoxic brain injury (decreased oxygen to the brain)
- Anoxic brain injury (total lack of oxygen to the brain)
- Brain aneurysm (A weakness in a blood vessel in the brain that balloons and fills with blood.)
- Brain tumor
- Encephalopathy (functioning of the brain is affected by some agent or condition such as viral infection or toxins in the blood).
- Stroke (Ischemic stroke means clot or blockage in blood vessel or hemorrhagic stroke when a blood vessel bursts and there is bleeding in the brain).

Leading Causes of TBI

- Falls-47%
- Blunt Trauma Accidents-15%
- Explosions/Blasts/Other 15%
- Vehicle Related Injuries-14%
- Assaults-Violent Assaults 9%

- Over 214,000 TBI related hospitalizations per year*
- Over 69,000 deaths each year, or 190 per day*
- 80,000-90,000 people each year experience a life-long disability because of TBI



*Center for Disease Control and Prevention

Types of TBI

- Mild-75-80% of cases
- Moderate-10-15% of cases
- Severe-10% of cases

Classification System For Traumatic Brain Injury			
Classification	Duration Of Unconsciousness	Glasgow Coma Scale	Post-Traumatic Amnesia
Mild	<30 Minutes	13-15	<24 Hours
Moderate	30 Minutes-24 Hours	9-12	1-7 Days
Severe	>24 Hours	3-8	>7 Days

Post Traumatic Amnesia (PTA)

Post Traumatic Amnesia (PTA)

Definition: Is a state of confusion and memory loss right after a traumatic brain injury. PTA occurs because there are impairments in attention and concentration which are required to place new information into memory storage.

Common Signs of PTA:

- Disorientation, Confusion, Agitation
- Antegrade amnesia (difficulty forming new memories)
- Retrograde amnesia (difficulty recalling old memories)
- Difficulties with alertness

-Length of the PTA determines the severity of the TBI. The longer the PTA, the higher likelihood that the TBI is causing memory impairments

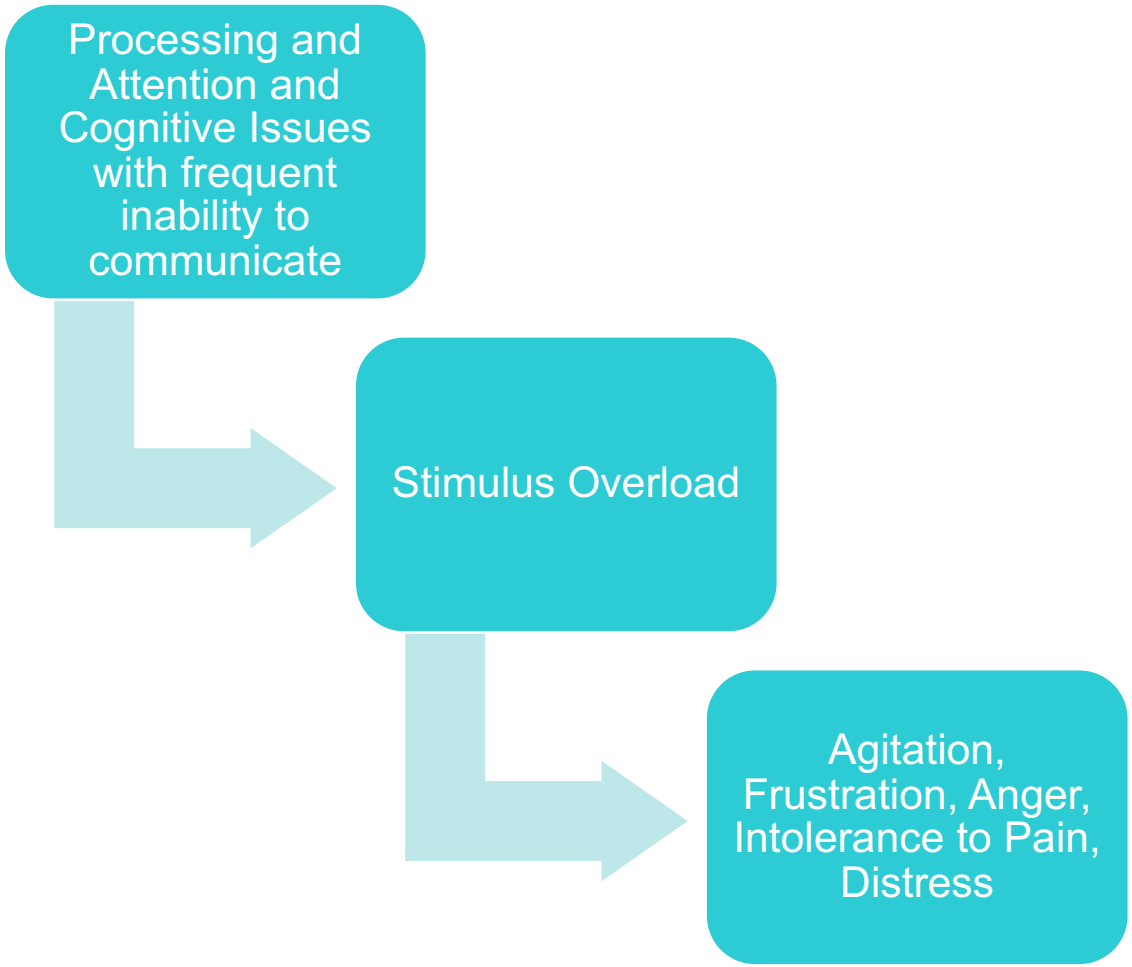
-PTA ends *AFTER* the person has continuous awareness of their environment and can form new memories

Sensory Impairments Following TBI

- **Hyposensitivity: Loss of sensory function**
  - Most common
  - Loss of sense of smell/taste due to neurological injury
  - Hearing impairment due to fractures of the temporal bone or damage to Vestibulocochlear nerve
  - Change to sense of touch

- **Hypersensitivity: Everyday levels of stimuli are now uncomfortable, overwhelming and/or distressing**
  - Phonophobia (Noise)-following brain injury or injury to inner ear
  - Photophobia (Light)
  - Sensitivity to Touch, Temperature, Movement, Vibration
  - Taste and Smell (more common to have loss)
    - Some do have distorted sense (particular foods, environmental smells, perfumes, etc..)

Sensory Overload



Inability to screen out intrusive background stimuli becomes difficult, therefore the patient will often hyper-focus on the stimulus, therefore leading them to become unable to complete other tasks

Sensory Overload Adverse Affects

- Increased difficulties with physical and cognitive functioning
- High levels of fatigue-generalized feeling of poor well-being
- Inability and willingness to tolerate care activities
- Inability to benefit from rehabilitation
- There is a hang-over effect to overload which carries over into the next 24 hours

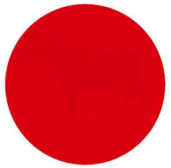
When a patient exbibits behavior problems from overload-it is usually related to exposing them to an environment that they are not yet ready for!

Our Journey to Better Care for Brain Injury Patients

- System to manage environmental stimuli Management System “EMS” → Environmental
- Objectively Measure Agitation → Agitated Behavioral Scale “ABS”
  - Document antecedents
  - Document what interventions worked to minimize agitation
  - Communicate amongst all disciplines

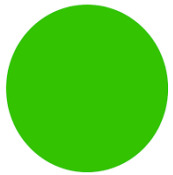
Environmental Management System (EMS)

- EMS provides guidelines on how the environment should be managed according to where each patient is in his or her rehabilitation.
- It describes how much stimulation the patient can comfortably tolerate.
- The system is based on the traffic light and consists of three levels.



- Red Light (Maximum Restrictions)

- Yellow Light (Moderate Restrictions)



- Green Light (Minimal Restrictions)

Rancho Los Amigos

Describes the **cognitive** and **behavioral** patterns commonly observed in patients as they recover from a TBI

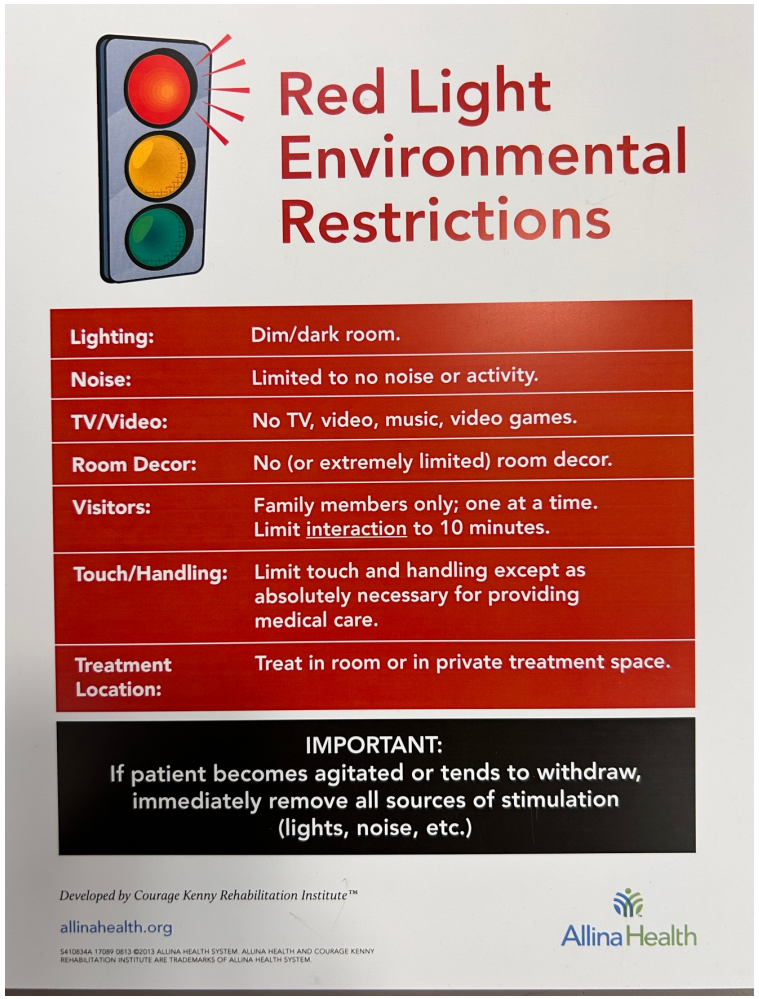
Level	
I	No Response: Total Assistance
II	Generalized Response: Total Assistance
III	Localized Response: Total Assistance
IV	Confused/Agitated: Maximal Assistance
V	Confused, Inappropriate Non-Agitated: Maximal Assistance
VI	Confused, Appropriate: Moderate Assistance
VII	Automatic, Appropriate: Minimal Assistance for Daily Living Skills
VIII	Purposeful, Appropriate: Stand-By Assistance
IX	Purposeful, Appropriate: Stand-By Assistance on Request
X	Purposeful, Appropriate: Modified Independent

RED Light

Patient Characteristics

- Typically Rancho IV
- High behavioral volatility
- Unable to process or make sense of stimulation in the environment
- High tendency to become "overloaded" or suffer from brain fatigue
- Typical behaviors include irritability, impulsivity, restlessness, escalates quickly and easily, thrashing movements, physical aggression OR withdraws from source of stimulation by turning away or pulling blankets over his or her head, hands over ears, etc.

Implementation



Education

- Educate family about the importance of environmental control
- Present agitation as a normal and positive stage of rehabilitation
- Educate family and staff on the "hangover effect" of becoming overstimulated or agitated and how that will affect the patient's ability to participate and benefit from therapy that day and the next
- Explain that the system is designed not to deprive the patient but to keep the patient safe and comfortable

YELLOW Light

Patient Characteristics

- Typically Ranchos V, VI and some VII's
- Moderate behavioral volatility
- Better able to process and make sense of small amounts of stimulation in the environment
- Moderate tendency to become "overloaded" or brain fatigued
- May not escalate or withdraw as easily, but may still do so occasionally

Implementation

Education

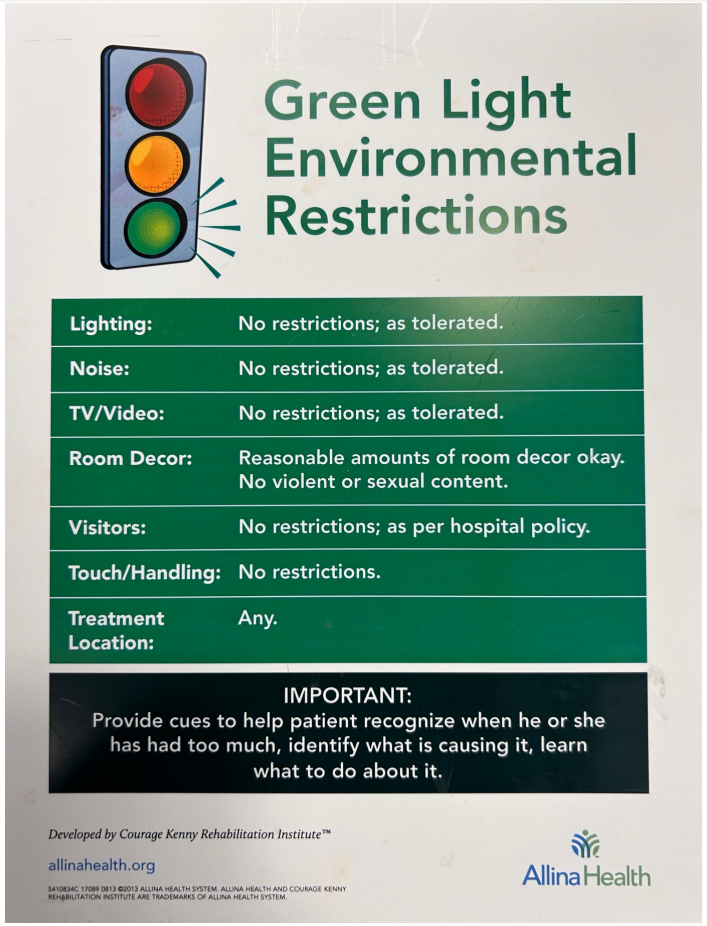
- Educate family about the importance of "shutting down" the environment at first signs of agitation or overstimulation
- Educate family and staff on the "hangover effect" of becoming overstimulated or agitated and how that will affect the patient's ability to participate and benefit from therapy that day and the next
- Present occasional bouts of agitation as a normal and positive stage of rehabilitation
- Inform patient and family that this will improve as the patient's brain heals and is faster and more efficient at making sense of all of the sensory input in the environment

GREEN Light

Patient Characteristics

- Typically Ranchos VII, VIII, IX, and X
- Low behavioral volatility
- Low tendency to become "overloaded" or brain fatigued

Implementation



Education

- Teach patient to become more self-aware of his or her feelings, stress levels, and responses
- Teach patient to identify situations or environmental factors that might cause mental overload or cognitive overstimulation
- Teach patient how to predict and/or control these situations
- Teach patient to remove him or herself from such situations as appropriate
- Help family members to understand any changes in the patient's responses to environmental noise and activity and the reasons for that

Who Orders EMS?

- Provider assess and reviews patients with brain injuries for risk for agitation
- An order is placed in Epic for Low Stimulation protocol, assigning the appropriate environmental level
- At least weekly, patient's EMS status will be reviewed at Team Conferences
- Status can be reviewed more often if necessary, as patient's condition changes

EPIC ORDER: LOW STIMULATION PROTOCOL (LSP)

LOW STIMULATION PROTOCOL CONTINUOUS, ROUTINE Discontinue 02/07/24 1327

Comments: Nursing to complete ABS (agitated behavior scale), discontinue when score < 21 for 72 hours. Restart with condition change.

Restriction level: Red - Dark room, natural light during day, limited/no room decor, low noise, No TV or radio, 1 family member at a time for 10" (unless pt. comforted by), limit touch/handling, quiet treatment area, private room, place red restriction sign on door. Remove all sources of stimulation immediately if pt. becomes agitated or withdraws.

Benefits of EMS When Effectively Implemented

- Prevents increase in intracranial pressure
- Keeps patient safe and comfortable
- Reduces need for sedating medications and restraints
- Reduces risk of injury to patient, staff, and others
- Keeps all clinical, non-clinical and covering team members safe and informed
- Encourages family involvement
- Allows patients to tolerate and benefit from therapy earlier in the rehabilitation process
  - Shorter lengths of stays
  - Improved functional outcomes
  - Discharge to less restrictive environments

Agitated Behavioral Scale: A Tool to Describe Agitation

- In the past we had no consistent way to describe a patient's agitated behavior.
- There is an evidence-based tool for describing agitated behavior: The Agitated Behavior Scale developed by the Ohio State University is a way to assess the nature and extent of agitation during the acute phase of recovery from acquired brain injury.
- This tool is designed to assess, measure, and describe the agitated behaviors which can be looked at over time to identify patterns

How to Use the ABS

The Scale asks you to rate 14 behaviors on a 1-4 scale that describe the frequency and intensity of each behavior.

The behaviors are:

1. Short attention span, easy distractibility, inability to concentrate
2. Impulsive, impatient, low tolerance for pain or frustration
3. Uncooperative, resistant to care, demanding
4. Violent and/or threatening violence toward people or property
5. Explosive and/or unpredictable anger
6. Rocking, rubbing, moaning or other self-stimulating behavior
7. Pulling at tubes, restraints, etc.
8. Wandering from treatment areas
9. Restlessness, pacing, excessive movement
10. Repetitive behaviors, motor and/or verbal
11. Rapid, loud or excessive talking
12. Sudden changes of mood
13. Easily initiated or excessive crying and/or laughter
14. Self-abusiveness, physical and/or verbal

ABS Scoring

1 = **absent**: the behavior is not present

2 = **present to a slight degree**: the behavior is present but does not prevent the conduct of other, contextually appropriate behavior. (The individual may redirect spontaneously, or the continuation of the agitated behavior does not disrupt appropriate behavior

3 = **present to a moderate degree**: the individual needs to be redirected from an agitated to an appropriate behavior, but benefits from such cueing.

4 = **present to an extreme degree**: the individual is not able to engage in appropriate behavior due to the interference of the agitated behavior, even when external cueing or redirection is provided.

Bogner, J. (2000). The Agitated Behavior Scale. *The Center for Outcome Measurement in Brain Injury.* http:..www.tbims.org/combi/abs (accessed March 12, 2024).

ABS SCORING

ABS Scores:

≤ 21 = No Agitation

22-28 = Mild Agitation

29-35 = Moderate Agitation

>35 = Severe Agitation

Discontinue scoring when ABS ≤ 21 for 72 hours, unless agitation resumes.

ABS SUBSCALE SCORES

- **Disinhibition Subscale** Scores: Total of Questions Items 1, 2, 3, 6, 7, 8, 9 and 10
  - Higher scores on this sub-scale may indicate that a patient is impulsive, restless, has trouble paying attention, and pulls on tubes
- **Aggression Subscale** Scores: Total of Questions: 3, 4, 5, and 14
  - Higher scores on theis subscale may indicate that the patient is threatening harm to self or others, has unpredictable anger, or is being violent to self and/or others
- **Lability Subscale** Scores: Total of Questions: 11, 12, and 13
  - Higher scores on this subscale may indicate that the patient has sudden modde swings, cries/laughs easily, or talks excessively

ADDITIONAL INSTRUCTIONS FOR SCORING

When to score:

- The ABS assessment tool will be used for all patients who have an Environmental Management System (EMS-Red/Yellow/Green Low Stimulation Protocol) ordered.
- Nurses should score after a period of observation, the best time frame being at the end of an 8/12 hour shift.
- At the end of the observation period indicate whether the behavior described in each item was present and, if so, to what degree: slight moderate, or extreme. Capture the highest score for the shift.
- If the total score is less than 21 for 3 days (72 hours), discontinue using the tool. Score again if there is a change in the patient's condition.
- The tool is also available at nursing discretion for any patient.

Boger, J. (2000). The Agitated Behavior Scale. *The Center for Outcome Measurement in Brain Injury*. http:..www.tbims.org/combi/abs (accessed January 14, 2019)

ABS FLOWSHEET

	3/3/2024			3/4/2
	0600	0900	1800	0000
AGITATED BEHAVIOR SCALE (ABS)				
Short attention span, easy distractibility, inability to conce…	1: Absent: the behavio…	4: Present Extreme De…	3: Present Moderate D…	2: Present Slight Degr…
Impulsive, impatient, low tolerance for pain or frustration.	1: Absent: the behavio…	3: Present Moderate D…	2: Present Slight Degr…	2: Present Slight Degr…
Uncooperative, resistant to care, demanding.	2: Present Slight Degr…	4: Present Extreme De…	4: Present Extreme De…	2: Present Slight Degr…
Violent and or threatening violence toward people or prop…	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…
Explosive and/or unpredictable anger.	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…
Rocking, rubbing, moaning or other self-stimulating behav…	1: Absent: the behavio…	3: Present Moderate D…	1: Absent: the behavio…	1: Absent: the behavio…
Pulling at tubes, restraints, etc.	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…
Wandering from treatment areas.	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…
Restlessness, pacing, excessive movement.	1: Absent: the behavio…	3: Present Moderate D…	1: Absent: the behavio…	1: Absent: the behavio…
Repetitive behaviors, motor and/or verbal.	1: Absent: the behavio…	3: Present Moderate D…	1: Absent: the behavio…	1: Absent: the behavio…
Rapid, loud or excessive talking.	1: Absent: the behavio…	1: Absent: the behavio…	2: Present Slight Degr…	1: Absent: the behavio…
Sudden changes of mood.	1: Absent: the behavio…	3: Present Moderate D…	3: Present Moderate D…	2: Present Slight Degr…
Easily initiated or excessive crying and/or laughter.	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…
Self-abusiveness, physical and/or verbal.	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…	1: Absent: the behavio…
DISINHIBITION SUBSCALE SCORE				
Disinhibition Subscale Score (higher scores on this scale …	9	22	14	11
AGGRESSION SUBSCALE SCORE				
Aggression Subscale Score (higher scores on this scale …	5	7	7	5
LABILITY SUBSCALE SCORE				
Lability Subscale Score (higher scores on the scale may i…	3	5	6	4
TOTAL SCORE				
Total Score	15	! 30	! 23	18
ABS ANTECEDENT INTERVENTIONS				
Antecednet Exceptions	Toileting			Toileting

ANTECEDENTS

Antecedent Definition: A thing or event that existed before or logically precedes another

Antecedents have been categorized into the following groups with each group having multiple specifics

Pain/Discomfort
Hunger/Thirst
Medical/Neurological Status Change
Fatigue
Toileting
Family/Visitors
Perceptual Difficulties/Cognitive Deficits
Communication Deficits/ Difficulties
Environmental
Emotional State/Mental Health
Interactions with Staff
Thought Process
Observed Behavior
Concentration

ABS ANTECEDENT INTERVENTIONS	
Antecednet Exceptions	Pain/Discomfort
Pain/Discomfort	Pain
Pain/Discomfort Interventions	Medication for pain/sc…

ABS ANTECEDENT INTERVENTIONS	
Antecednet Exceptions	Toileting
Toileting	Timed toileting to prev…
Toileting Interventions	Keep toileting/bowel p…

ABS ANTECEDENT INTERVENTIONS	
Antecednet Exceptions	Hunger/Thirst
Hunger/Thirst	Meal Times
Hunger/Thirst Interventions	Food/Liquid consisten…

ABS ANTECEDENT INTERVENTIONS	
Antecednet Exceptions	Family/Visitors
Family/Visitors	Number of people in r…
Family/Visitors Interventions	Provide education to f…

ABS NOTE

ligned

Agitated Behavior Scale Summary

Summary:

Situation/Behavior: **At 1730 patient was restless and agitated. Pulling his NG tube and trying to get out of bed**
Interventions: **Patient was redirected, toileted, and given pain medication**
Response: **Patient is calm and resting in bed 15 minutes after intervention**
Recommendations for next RN: **Follow EMS order, assess pain, approach patient calmly, and toilet every 2 hours**
Recommendations for Provider: **Patient is more agitated on evenings. Please re-evaluate EMS order**

Agitated Behavioral Scale (ABS)

Total Score	Disinhibition Score	Aggression Score	Lability Score
(!) 34	22	10	5

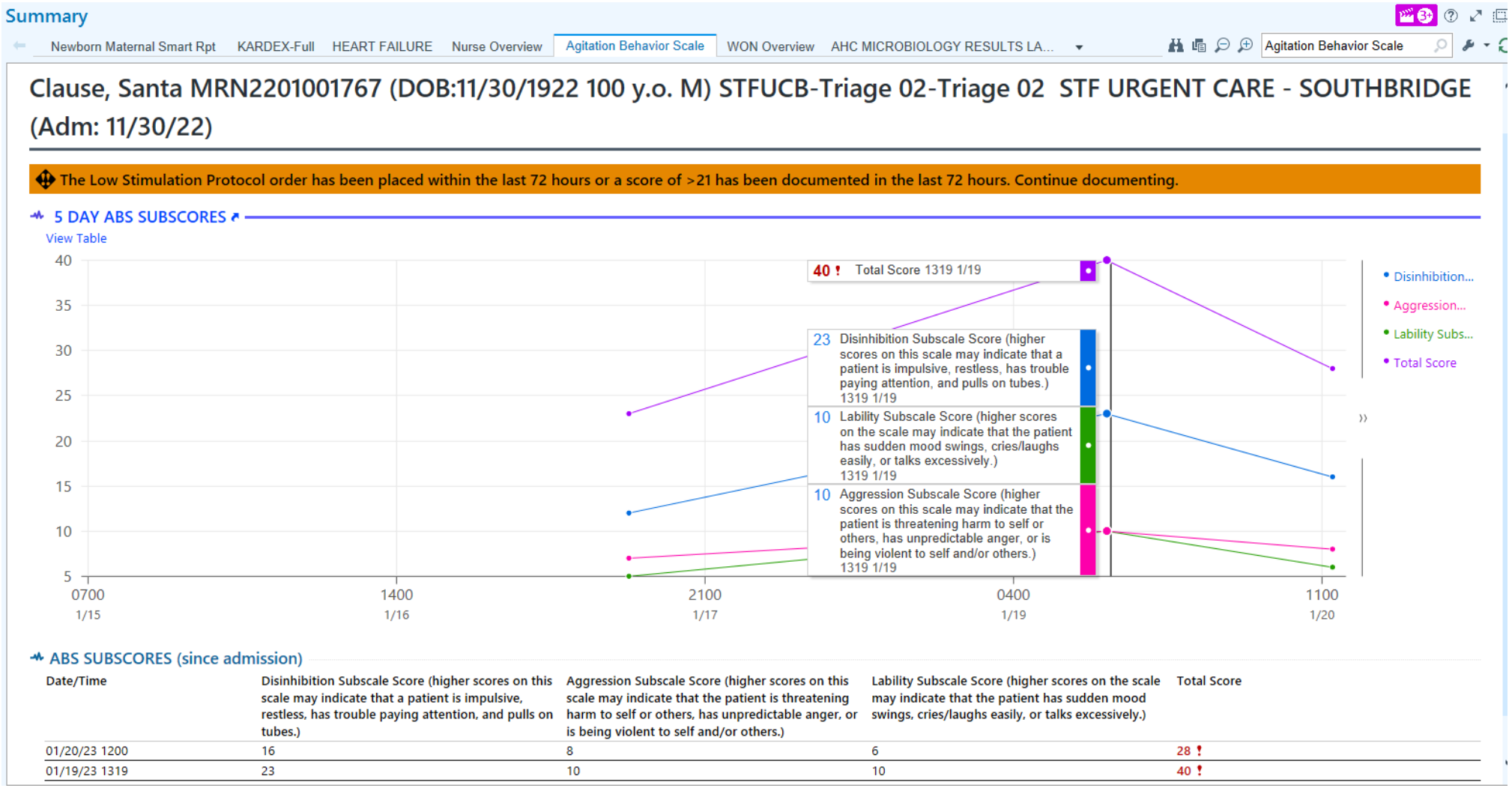
Antecedents and Interventions

Pain/Discomfort: Pain
Pain/Discomfort Interventions: Medication for pain/scheduled vs. PRN: medicate prior to therapy/wound cares

Reference Guide to ABS Scoring:

ABS Scores:
≤ 21 = No Agitation
22-28 = Mild Agitation
29-35 = Moderate Agitation
>35 = Severe Agitation
Discontinue scoring when ABS ≤ 21 for 72 hours after EMS order placed, unless agitation resumes.

ABS SCORE TRENDS



Date/Time	Disinhibition Subscale Score (higher scores on this scale may indicate that a patient is impulsive, restless, has trouble paying attention, and pulls on tubes.)	Aggression Subscale Score (higher scores on this scale may indicate that the patient is threatening harm to self or others, has unpredictable anger, or is being violent to self and/or others.)	Lability Subscale Score (higher scores on the scale may indicate that the patient has sudden mood swings, cries/laughs easily, or talks excessively.)	Total Score
01/20/23 1200	16	8	6	28 !
01/19/23 1319	23	10	10	40 !

CASE STUDY-PATIENT HISTORY

Admitting Diagnosis:

Traumatic brain injury (TBI) & Hypoxic Brain Injury

- Status post-cardiac arrest. Resulted in:
  - Subarachnoid hemorrhage
  - Frontal lobe contusion
  - Trace subdural hematoma

Baseline Functional Status:

Prior to cardiac event: Lived at home with wife

Independent with ADLs

PATIENT PRESENTATION UPON ADMISSION

Day 1 – Evening Shift

Flown from another state for rehabilitation care

- Sedated for Flight

Arrival to Unit

- Agitated & Restless- Sedation effects subside
- Ranchos Low Amigos Level IV- Confused/Agitated: Maximal Assistance Needed

Nursing Actions

- Follow Low Stimulation Protocol:
  - Red Light Environmental Restrictions (EMS)
  - ABS Score and note
- 1:1 Sitter Observation

DAY 1 - NOC SHIFT

Around 0100: Multiple attempts to get out of bed

- Hit 1:1 sitter “repeatedly” in abdomen & chest

Intervention

- Code Green was paged
- IM Zyprexa Administered by team of staff
- EMS order followed strictly
- Red Environmental Management Restrictions followed
- Provider modified medications based on ABS score and note

PATIENT PROGRESS: KEY STATUS CHANGES

Function Status Changes

- Total Dependence/Maximal Assistance at Admission → Independent at Discharge
  - Toileting & Hygiene
  - Sit pivot transfer to Independent in the room
  - Locomotion: Walking

Relevant Medications

- Zyprexa: IM → PO PRN → Successfully Stopped
- Keppra: BID → Daily → Successfully Stopped
- Trazadone and Melatonin: PRN to reduce sleep disturbance
- Tylenol: PRN for reduce pain

EVIDENCE-BASED REHAB NURSING INTERVENTIONS

Low Stimulation Protocol Order → Prompts RN To:

- Assess & Document Agitation Level via Agitated Behavior Scale (Flowsheet & Note) ~ ABS
- Utilize Appropriate Environmental Management Based on Agitation Level~ EMS
- Communicate to Provider & Rehabilitation Interdisciplinary Team as appropriate per plan of care & specific interventions

Specific EMS Strategies Based on Agitation Level: RED EMS → GREEN EMS

- Therapy Sessions in Patient's Room
- Meals in Room
- Upgrade Environmental Restrictions as tolerated

Observation:

- 1:1 sitter
- Determined NOT to use ROBs → Further cause of agitation
  - Loud alarms & verbal redirection from camera

PATIENT OUTCOMES

Ranchos Los Amigos Scale Levels
Admission Score IV: Confused/Agitated- Maximal Assistance
Discharge Score VIII: Purposeful/Appropriate-Supervision As Needed

Agitated Behavior Scale (ABS) Scores:
Admission: Severe Agitation (ABS Score > 35)
Discharge: No Agitation (ABS Score: 16)

Functional Status:
- Admission: Total Assist
- Discharge: Independent
- Able to Discharge Home, Not to SNF (Original Discharge Plan)
  - Family supervision
  - Home care therapy
  - Independent in room prior to discharge without a fall
  - Independent with ADLs & transfers

OPPORTUNITIES FOR IMPROVEMENT

- Opportunity for Improved Adherence to Standard Practice: Know Why & Comply
  - Red Light Environmental Restriction
  - Violence Prevention Strategies
- Hardwiring ABS flowsheets and note documentation
- Documenting on the worse behavior during the shift
  - This will help guide provider with appropriate treatment plan
- Educate float staff on how to properly document on ABS flowsheets and note

LIMITATIONS

Agitated Behavior Scale (ABS)

- Literature Review Revealed:
  ABS = The ONLY evidenced-based tool designed for the brain injury population for the purposes of:
    - Agitation scoring
    - Intervention setting

- Recent ABS-Related Publications (Within 10 Years): Fewer Articles
  Original Publications >20 Years Ago

REFERENCES

- Bogner, J. (2000). The Agitated Behavior Scale. *The Center for Outcome Measurement in Brain Injury.* http:..www.tbims.org/combi/abs (accessed March 12,2024).
- Amato, S., Resan, M., & Mion, L. (2012). The feasibility, reliability, and clinical utility of the agitated behavior scale in brain-injured rehabilitation patients. Rehabilitation nursing : the official journal of the Association of Rehabilitation Nurses, 37(1), 19–24. https://doi.org/10.1002/RNJ.00001
- Brous E. "Workplace Violence: How It Affects Health Care, Which Providers Are Most Affected, and What Management and Staff Can Do About It." AJN 118, no. 10 (Oct 2018):51-55.
- Centers for Disease Control and Prevention (2024, March). *Traumatic Brain Injury & Concussion .* Retrieved March 1, 2024, from www.cdc.gov/traumaticbraininjury
- Carrier, S. L., Hicks, A. J., Ponsford, J., & McKay, A. (2021). Managing agitation during early recovery in adults with traumatic brain injury: An international survey. Annals of physical and rehabilitation medicine, 64(5), 101532. https://doi.org/10.1016/j.rehab.2021.101532
- Janzen, S., McIntyre, A., Meyer, M., Sequeira, K., & Teasell, R. (2014). The management of agitation among inpatients in a brain injury rehabilitation unit. Brain injury, 28(3), 318–322. https://doi.org/10.3109/02699052.2013.860478
- Joint commission, 2022. Patient Safety Topics: Workplace Violence Prevention. https://www.jointcommission.org/resources/patient-safety-topics/workplace-violence-prevention/
- Wilson, H. J., Dasgupta, K., & Michael, K. (2018). Implementation of the Agitated Behavior Scale in the Electronic Health Record. Rehabilitation nursing : the official journal of the Association of Rehabilitation Nurses, 43(1), 21–25. https://doi.org/10.1002/rnj.297

QUESTIONS

Antecedents and Interventions

ANTECEDENT –INTERVENTION CASCADE

Fatigue • Poor sleep/sleep interruption • Disrupted sleep/wake cycle • Nightmares • ROBS, 1:1, overhead pages, lab draws, vitals, repositioning, blood glucose checks, alarms, medication administration, tube feed, intermittent catheterization	• Examine sleep meds/sleep hygiene issues • Help patient remain active during day • Encourage adequate rest periods—scheduled rest times; offer choices around timing/pace of cares; reduce demands • Schedule challenging tasks when least fatigued; break up tasks or alternate physical/cognitive, challenging/easier tasks • Medications contributing to over-sedation; sleep disruption? • Consider co-treatment
Toileting • Timed toileting to prevent bladder incontinence • Intermittent catheterization • Bowel program to prevent incontinence • Lack of privacy/need for supervision while sitting on commode/toilet • Constipation, incontinence cares	• Keep toileting/bowel program on schedule • Patients may be at increased risk for agitation with invasiveness of catheterization—consider 2 staff: one to perform procedure, one to distract/calm patient • Assess for appropriateness to use urinal/commode • Toilet/bathroom visible to patient • Check for incontinent episodes and clean up as soon as possible if patient allows

ANTECEDENT-INTERVENTION CASCADE

Family/Visitors • Number of people in room • Pre-existing difficult relationships with family/visitors • Individual wanting to leave with family/visitors	• Provide education to family/visitors on EMS • Staff alert to request Family Catalyst Education • Limit number/frequency/timing of visitors if patient is agitated around timing of visitors • Encourage family members to be around if they are calming influence
Perceptual Difficulties/Cognitive Deficits • Visual Impairment/visual neglect • Hearing Impairment • Memory Impairment • Slow processing • Attention deficits/increased distractibility • Decreased concentration/focus • Decreased reasoning/poor judgment/impaired insight • Motor/Object apraxia	• Approach pt on non-neglected side • Remove excess furniture, clutter from room • Minimize barriers to movement/function • Cover mirrors and computer monitor • Adequate lighting
Communication Deficits/Difficulty • Non-English speaker • Non-native speaker of English • Expressive deficits • Comprehension Deficits • Unable to follow directions	• Hearing aids/glasses in place • Proper interpretation if non-English speaker • Use short, simple phrases/sentences, familiar words • Allow patient time to process information/respond • Communicate in quiet place • Encourage pt to speak slowly; rephrase and ask for clarification • Frequent checks

ANTECEDENTS-INTERVENTIONS

Environmental • Noise, lights, clutter, scents, clothing • Medical devices: SCD, braces, tubes/lines • Restricted movement: bed rail, restraints, SCD • Family/visitors • Screens—computer in room for nursing use, cell phone, tablet, television • Unfamiliar room, change in room • Bathing/shower in unfamiliar setting • Task too difficult • Too little or inconsistent structure to schedule • Too many people in room • Too many people talking at same time	• Remove unnecessary lines, tubes, catheters; cover lines with clothing, abdominal binder, apron • Provide education regarding treatment benefits of lines/tubes—may need frequent repetition • EMS/declutter/limit screen time/relaxation channel • One person speaking at a time; limit number of people in room at same time • Enable patient to perform ADLs as able • Provide reassurance that staff are here to help care for patient • Acknowledge and validate areas of concern • Observe from safe distance, remove unnecessary staff • Remove audience to behaviors to allow cooling off if pt is protected from injury
Emotional State/Mental Health • Anger/frustration • Anxiety • Depression • Loneliness/missing someone/sadness	• Redirect patient's attention to less stimulating/frustrating activities • Provide one to one social interactions • Respond to patient's feelings—"You must be lonely" instead of "you can't go home." • Assist with calling friend or family member; remind patient when family/friends will visit • Allow personal photos/items from home if calming • Empathize with feelings, but not the behavior ("I understand you are frustrated, but it is not okay to threaten/hit staff.") • Provide encouragement and emotional support • Positive feedback between outbursts when patient is back in control • Code Green • Medications as last resort • Report suicidal ideation to psychologist

ANTECEDENT-INTERVENTION CASCADE

Interactions with Staff
• Individual not aware of staff role—no introduction, startled with approach from neglected side, lack of explanation of cares being provided
• Time pressure
  ○ Rushing nursing cares
  ○ Not allowing adequate time for response
  ○ Insisting on immediate cooperation
  ○ No re-approach at later time
• Staff Fear and Anxiety
  ○ Anxious/fear vs calm/friendly
  ○ Cultural beliefs/preferences, gender preferences, language barriers
  ○ Touch/pulling on arms for compliance
  ○ Use of "No" or "Don't"
  ○ Arguing/attempt to reason with or correct
  ○ Too many cues/not listening
  ○ Overestimating individual's ability
  ○ Attention provided only when individual is agitated
  ○ Ignoring/not paying attention to individual's feelings/emotional state
  ○ Code Green Team present
	• Respect personal privacy—knock if door closed, verbal notice when coming around curtain
	• Keep patient covered as much as possible when providing cares to promote dignity and keep warm
	• Avoid sudden touching or grabbing unless safety is compromised—let patient know that you might need to touch them for safety
	• Inform patient what you are going to do before you do it
	• Allow time for pt to finish thoughts/avoid rushing pt or cares
	• Identify pt's gender preferences for nursing cares
	• Identify pt's biases against particular cultures
	• Identify if pt prefers a particular caregiver—observe cares provided by this caregiver to identify effective strategies
	• Take time to get to know your patient—what is their story? What are their interests
	• Speak at eye level
	• Review expectations with 1:1 sitter/assign consistent staff
	• Stick to routines/redirect to familiar activity
	• Initiate coping strategies—breathing, assurances for care/concerns
	• Minimize changes/alert when changes are going to occur

ANTECEDENT-INTERVENTION CASCADE

Observed Behaviors • Restlessness/akathisia, repetitive movements/actions, pacing • Impulsivity • Hyper-verbal • Abrupt/sudden changes in mood • Resistive to assistance/touch with mobility • Uncooperative/resistant to cares • Verbal/physical threat to self • Verbal/physical threat to others • Explosive/unpredictable anger	• Have patient sit at nursing station—provide a task such as folding washcloths • Allow patients to walk/pace or wheel in hallways with staff • Offer choices for activity • Do not surround person who is agitated—approach calmly from in front and speak in low-pitched voice • Pay attention to nonverbal messages • Avoid sudden touch/grabbing of patient unless safety is compromised • Empathize with feelings, but not behavior • Maintain safe distance from patient • Use interventions from behavior plan known to assist with calming • Allow cooling off provided patient is safe • Remain calm, re-approach • Reduce stimulation/clutter in room • 1:1 sitter
Difficulty with Focus/Attention	• Break down task into smaller steps • Provide assistance before frustration escalates • Stop or defer task to later • Switch task to something patient will be successful with • Consistent schedule/expectations • Use demonstration/one cue at a time • Use hand over hand assistance as appropriate • Allow additional time for processing and response • Anticipate needs