Why won't she participate?

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Objectives

Using a case based approach this presentation aims to explore:

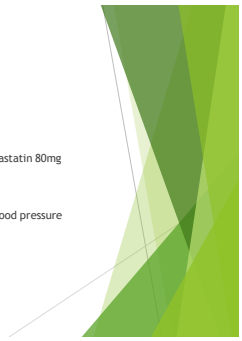
- Pre-stroke contributing factors to lack of participation
- How to correlate neurological symptoms and diagnostic imaging
- Staffing considerations
- Effects of illness on motivation
- Strategies to engage in therapy

The women that wouldn't participate

- 61 year old women presented to the ED as an acute stroke activation
- Assessed by the stroke team in the ED
- Woke up, attempted to ambulate and fell x2 because of left sided weakness
- PMH: alcohol misuse, dyslipidemia
- No home medications
- Social history: lives alone, no family. Works in a call center. Independent with all ADLs and IADLs.
- Goals of care discussion at time of ED presentation: stated did not want to be dependant on others

Stroke Work Up and Secondary Prevention

Echocardiogram: EF 60-65%, no regional wall abnormalities
Holter monitor: no atrial fibrillation
Lipid profile: Total cholesterol 5.89, LDL 2.8 TC/HDL 2.3, atorvastatin 80mg
Anti-platelet/anti-coagulation: ASA 81 mg
Smoking cessation: nicotine replacement, tapering dose
Hypertension: metoprolol and perindopril to maintain target blood pressure



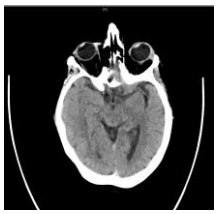
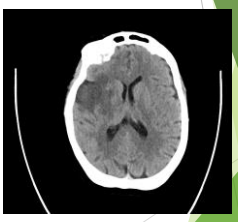
History

- Sixty- year old call center employee
  - Lives alone, no family
  - Independent
  - Hx of smoking, ETOH, dyslipidemia
  - No medications
- Well on going to bed
- On rising, falls due to left sided weakness
  - Can't get up
  - Found by neighbor screaming on the floor

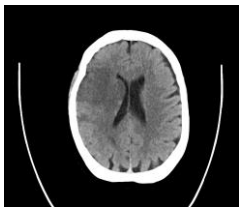
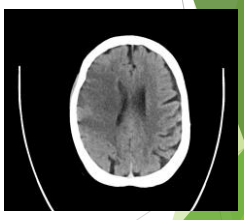
Examination

- NIHSS = 19
  - Dysarthric
  - Left hemiplegia, hemianopsia
  - Neglect
    - Right gaze preference
    - Does not attend to objects on left side
    - Does not appreciate deficit – I'm OK
    - Does not recognize her left arm

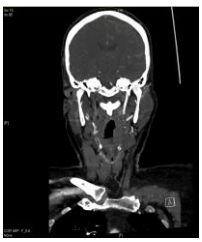
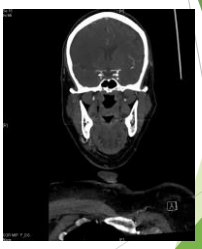
Initial CT scan

Initial CT scan

Initial CT Angiogram

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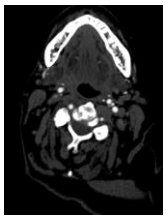

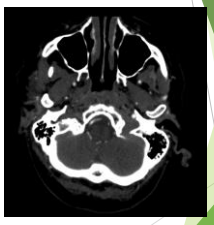

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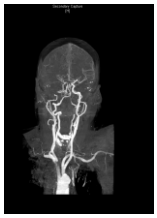


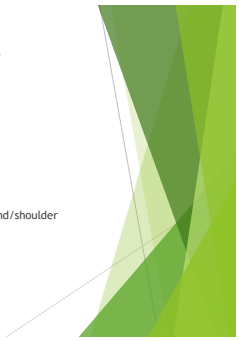
Acute Assessment

- Large Right MCA infarct
  - Tandem Occlusion (origin of ICA and MCA)
  - Atherosclerosis
- Clearly defined Infarct with mass effect
  - Not recoverable with revascularization
  - Risk of herniation and death

Initial Allied Health Assessments

Physiotherapy:

- Agreeable to participate
- Apraxia
- L inattention
- Maximal Assist
- ++flexor tone left biceps, no active movement left wrist/hand/shoulder
- No movement left leg
- Low tolerance
- Mechanical lift



Initial Allied Health Assessments

Physiotherapy Goals

- Address left biceps tone
- Implement passive ROM
- Pursue quality of life goals
- Maximize recovery to left side

Initial Allied Health Assessments

Occupational Therapy

- Gaze deviated to the right
- Alert and oriented x3, able to recount events
- Able to follow instructions
- 4 flights of stairs
- ++flexor tone to left elbow, unable to extend fully
- Dependant for ADLs, IADLs and functional mobility
- Left neglect

Initial Allied Health Assessments

Social Work

- Smoker, approx. 10/day
- Lives alone in a 4th floor walk up apartment
- Worked 4 days per week at a Scotiabank call center
- Recently gave up extended health benefits
- No family, has a friend as POA
- Not a driver, took city bus
- Denied past mood issues, and reported mood as ok

Initial Allied Health Assessments

Speech Language Pathology/Communication

- Written affected by neglect, overlapping, poor spacing, leaning to right
- Speech production is monotonous
- No obvious oral/facial defects or asymmetry
- Information processing needed verbal queuing
- Offers inaccurate perceptions and not able to accept other views
- Started reading from midline
- Auditory comprehension unaffected

Possible pre-Stroke factors

Personality and Experience:

- Described self as a "homebody", isolated at times
- Social network closely tied to work
- Important to explore mood, low self efficacy and cognitive impairment as it has been shown to effect participation in rehabilitation

Addictions

- Physiological symptoms related to withdrawal.
  - Irritability, low mood, anxiety and depression, difficulty focusing
  - Headaches, restlessness, difficulty sleeping, digestive issues

Our patient

- History of alcohol misuse and nicotine use
- Nicotine replacement
- Monitor for signs and symptoms of alcohol withdrawal in acute phase

Possible pre-Stroke factors

Cognition

- Executive function and memory and apathy were moderately predictive of participation

Effects of illness on participation

Depression:

- loss of self perception, wanted to be alone, fear
- Predictor of participation
- Patients with higher levels of depression on screening were less effective in rehabilitation.
- Patients with history of depression were associated with longer lengths of stay

Our case

Treating depression:

- Patient was assessed by the medical psychiatry service
- Had one brief episode of suicidal ideation
- Rx: Mirtazapine
- Visit from chaplain services and HELP volunteer program to promote socialization

Effects of illness on participation

Deconditioning

- Decreased activity tolerance
- Any gains slow to realize

Our patient:

- PTA/OTA therapy program
- Engage nursing to increase chair tolerance
- Made ALC, ready for discharge from acute care on approximately 14 days post stroke, actual discharge 115 days

Effects of illness on participation

Loss of autonomy

- Self efficacy is related to quality of life

Our patient:

- Hyper-focused on getting back to work
- Would suggest going home when talking about discharge planning

Effects of illness on participation

Sleep apnea/Interrupted sleep

- Obstructive sleep apnea is associated with a lower cognitive and functional status in patients admitted for stroke rehabilitation

Our case

Treating sleep apnea

- Underwent overnight oximetry monitor and diagnosed with probable obstructive sleep apnea, refused to use cpap

Effects of illness on participation

Pain and Fatigue

- Fatigue and pain are common after stroke and are negatively correlated with outcomes important to rehabilitation.
- Patients with higher levels of fatigue were shown to participate less

Our case

Treating Pain and Fatigue

- Assessment of Botox for pain in effected shoulder and arm
- Routine analgesics and prn
- Lyrica
- Patient often uses complaint of pain in order to return to bed, when assessed is vague or reports pain resolved

Neurological Deficits

- hemiplegia
- neglect
- anosognosia
- hemianopsia

On rehab – strategies for improvement

Hemiplegia:

- Paralysis on one side of the body

Our case:

- Flaccid left arm and leg
- Able to sit in a tilt wheelchair, low sitting tolerance
- Able to participate in own grooming in the bed. Requires queuing and assistance when two hands required

On rehab – strategies for improvement

Neglect

- is a common and disabling condition following **brain** damage in which patients fail to be aware of items to one side of space

Our patient:

- Requires queuing to scan to the left, staff encouraged patient to look left by placing themselves and objects on left side

On rehab – strategies for improvement

Anosognosia

- Is a deficit of self awareness. The person with the disability seems unaware that the disability exists. It results from physiological damage to specific areas of the brain, typically the parietal lobe or fronto-temporal-parietal area in the right hemisphere.
- The physiological damage distinguishes anosognosia from denial

Our patient:

- Commonly made comments highlighting her unawareness about her deficits
- Fall in hospital from wheelchair "just getting up to the bathroom and I tripped"

On rehab – strategies for improvement

Hemianopsia

- The person can only see one side of the visual field in each eye. The person may not be aware the visual field cut is in both eyes

On rehab – strategies for improvement

Our Patient:

- Left visual field cut
- Interactions coming from the left
- Encourage scanning to the left

Interactions with staff

- Encourage stroke patients self confidence by setting clear expectations for self care and promoting self efficacy
- What is consent?

Our patient

- Patient asked that staff change the way consent was requested: “don’t give me a choice”

Why is participation important

- FIM improvements are decreased in poor participators
- Increased length of stay
- Inability to return home

How can she succeed anyway?

Assess for all contributing factors

- Multi-disciplinary assessments
- Based on assessments set small realistic goals
- Treatment needs to be tailored to focused on interests of the patient

How can she succeed anyway?

Fix what you can

- Treat any co-morbidities
- Consult specialists
- Monitor for acute illness

Our patient

- Vitamin supplements
- Anti-depressants
- Bowel protocol
- PRN medications

How can she succeed anyway?

Monitor your own reactions

- Allow team members to identify their frustrations
- Allow patient to identify their frustrations
- Be realistic
- What does capable mean?

How can she succeed anyway?

Persist

- Improvement despite barriers
- Allow patient autonomy
- Explore with patient reasons for poor participation
- Address patient concerns

How can she succeed anyway?

Tailor care plan to patient

- Use of recreational therapy focused on the patients interests

Our patient

- Recreational Therapy, patient outings
- Exploring opportunities for socialization

Questions?

Thank you!

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