



Go To Clinical Case

While caring for this client, be sure to review the concept maps in chapters 3 and 4.

Case 2: Cognitive Impairment from Brain Attack

Related Concepts: Perfusion, Mobility, Nutrition

Threaded Topics: Medication Education, Stroke Protocol, Fall Risk, Aspiration Risk, Bleeding Risk, Enteral Tubes

Bill Michaelson is a 74-year-old retired computer analyst. His history includes hypertension, hypothyroidism, gout, diabetes type 2, and chronic obstructive pulmonary disease. He smokes one-half pack of cigarettes each day and is moderately overweight (BMI 26.6). Bill was recently diagnosed with atrial fibrillation and was started on warfarin. He and his wife Margie walk their dog 20 minutes each day.



1. Identify concerns of Bill's health history that are risk factors for stroke.

Hypertension		
<input type="checkbox"/> Gout	<input type="checkbox"/> Overweight (BMI 26.6)	<input type="checkbox"/> Sedentary lifestyle
<input type="checkbox"/> Diabetes type 2	<input type="checkbox"/> Hypothyroidism	<input type="checkbox"/> Chronic obstructive pulmonary disease
<input type="checkbox"/> Current smoker	<input type="checkbox"/> 74-years-old	<input type="checkbox"/> Atrial fibrillation

Bill and Margie present to the emergency department today. Margie says that Bill "isn't himself" and is "acting goofy." The emergency department nurse gathers the health history from Margie.

2. The emergency department nurse performs a neurological assessment on Bill. Complete the acronym FAST to assess for symptoms of a stroke quickly.

F - _____

A - _____

S - _____

T - _____

Scan the QR code to learn more about FAST with stroke assessment.



www.stroke.org/understand-stroke/recognizing-stroke/act-fast/



It is determined that Bill is having a stroke and a stroke alert is called. The neurology team comes to the bedside and orders a CT scan of his brain, without contrast, STAT.

3. How should the nurse prepare Bill for the CT scan?

1. Remove all metal from Bill's pockets.
2. No additional prep is needed.
3. Place electrodes on Bill's scalp.
4. Position Bill on his stomach for the scan.

4. THIN Thinking Time!

Reflect on the cues and data about Bill and apply **THIN Thinking** to prioritize the concerns.

- T - _____
- H - _____
- I - _____
- N - _____

T - Top 3
H - Help Quick
I - Identify Risk to Safety
N - Nursing Process

Scan to access the
10-Minute-Mentor →
on THIN Thinking.



NurseThink.com/THINThinking

The CT scan shows that Bill is experiencing an ischemic stroke caused by a thrombus. The team orders intravenous tissue plasminogen activator (IV-tPA).



POLICY AND PROCEDURES

Guidelines for administration of Tissue Plasminogen Activator (tPA)

- Confirm no history of gastrointestinal or urinary bleeding within 21 days, no stroke/serious head injury/intracranial surgery within 3 months.
- Do not insert NG tubes, urinary catheter tubes, IV lines, or arterial lines for 24 hours after administration of tPA.
- Monitor coagulation laboratory results during and after tPA administration (PT/INR, platelets, PTT).
- Obtain frequent vital signs and neurologic assessments.

5. NurseThink® Prioritization Power!



Evaluate the guidelines for the administration of tPA and pick the **Top 3 Priority** nursing considerations.

1. _____
2. _____
3. _____

The neurology team decides Bill is an excellent candidate for endovascular therapy. The emergency department places two IVs, both 18 gauges in each antecubital fossa and an indwelling urinary catheter. The stroke team takes Bill to the interventional radiology suite and perform a manual thrombectomy or aspiration and removal of the clot in Bill's brain. The procedure was performed through Bill's right femoral artery. The sheath was removed successfully. The stroke nurse provides hand-off report to the intensive care unit (ICU) nurse.

6. The ICU nurse assesses Bill's right groin and palpates a firm bump above the access site. What would be the best action(s) by the nurse? Select all that apply.

1. Immediately apply manual pressure just above access site.
2. Call the provider.
3. Change the dressing and reassess the site in 15 minutes.
4. Assess and palpate peripheral pulses, bilaterally.
5. Document the findings as normal.

Nursing | Flow Sheets | Provider | Labs & Diagnostics | MAR | Collaborative Care | Other

Nurse Think HEALTHCARE SYSTEM

Name: Bill Michaelson | Age: 74 years
Health Care Provider: John Dally, MD | Allergies: Latex
Code Status: Full Code

NURSING NOTE

June 14 1645	Received report from the stroke team. Client transported to intensive care. The client is alert and oriented x 4, but somnolent. Pupils are equal, round, and reactive to light and accommodation (PERRLA). Heart rhythm is irregular; telemetry monitor shows atrial fibrillation at a controlled rate. BP 163/86 (112), heart rate of 83 beats per minute, respiratory rate 14 breaths per minute and oxygen saturation of 94% on 2 L/nasal cannula. Lungs are diminished throughout. Weak grips and pulls on the right, absent on the left side. Active bowel sounds in all 4 quadrants – abdomen soft, non-tender. Bleeding noted at the right groin insertion site. Manual pressure held to the puncture site for 30 minutes. Distal pulses remain palpable.
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After 30 minutes of manual pressure, the hematoma has resolved. Dorsalis pedis and posterior tibialis pulses are palpable and 2+, bilaterally. Bill is resting comfortably in his bed. Margie is at the bedside and looks distraught.

7. Margie says to the nurse, "This is my entire fault. Bill bruises easily from the warfarin, so we decided to cut the dose in half to help with the bleeding." Which response by the nurse is most appropriate?
1. "It is acceptable to cut medications in half to lessen the side effects."
 2. "It is very important to take all medications as prescribed by your provider."
 3. "You need to be more careful next time; he could have died from this."
 4. "A bleed, not a clot caused Bill's stroke, so it is irrelevant."

The ICU nurse reviews the prescriptions written by the provider.

Nursing
Flow Sheets
Provider
Labs & Diagnostics
MAR
Collaborative Care
Other



Nurse Think
HEALTHCARE SYSTEM

Name: Bill Michaelson Age: 74 years
 Health Care Provider: John Daily, MD Allergies: Latex
 Code Status: Full Code

HEALTH CARE PROVIDER PRESCRIPTIONS

<p>June 14 1630</p>	<ol style="list-style-type: none"> 1. Start IV heparin bolus and infusion. 2. Initial heparin bolus of 60 units/kg x1, IV 3. Initiate a continuous heparin infusion at 12 units/kilogram/hour. 4. Recheck aPTT every 6 hours.
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8. Bill weighs 175 pounds. How many units of heparin will Bill receive with the initial heparin bolus? How many units of heparin will Bill receive per hour with the continuous infusion? Write out your calculations here.



9. How many mL per hour of heparin will Bill receive with the heparin infusion? Use the image to determine the rate at which the pump should be set. Write out your calculations here.

10. Margie urgently calls the nurse into the room. Bill starts to mumble, "thirsty very so." Margie looks at the nurse and says, "Why is he talking like that? What is he trying to say?"

1. "Bill has receptive aphasia. He does not understand what we are saying to him."
2. "Bill has expressive aphasia. He can understand us, but he struggles to find the best words."
3. "Bill has global aphasia. It is a combination of both receptive and expressive aphasia."
4. "Bill is confused from the medications we gave him."

11. Because of Bill's aphasia, he has difficulty communicating. How should the nurse respond to Bill?

1. Encourage Bill to write when he is having difficulty speaking.
2. Write everything down on a piece of paper and have Bill read it.
3. Talk slowly so that Bill can better understand.
4. Ask Bill to point to what he needs.

12. Match the neurologic and cognitive deficit on the left to the description on the right.

Deficit	Description
A. Hemiparesis	_____ Double vision.
B. Hemiplegia	_____ Memory loss.
C. Ataxia	_____ Difficulty in swallowing.
D. Anomia	_____ Misuse of objects because of failure to identify them.
E. Apraxia	_____ Staggering, unsteady gait.
F. Agnosia	_____ Inability to express oneself through speech.
G. Amnesia	_____ Weakness of the face, arm, and leg on the same side.
H. Aphasia	_____ Difficulty in forming words.
I. Diplopia	_____ Inability to remember names of things.
J. Dysphagia	_____ Paralysis of the face, arm, and leg on the same side.
K. Dysarthria	_____ Inability to recognize familiar objects, tastes, sounds and other sensations.

13. The nurse is rearranging Bill's bedside table. Bill had a left hemispheric stroke; make an X on the image where the nurse should place the bedside table.



14. Bill has been working with physical therapy on ambulation and using a walker. Place the steps of using a walker in the correct order. _____

1. Move the walker forward a short distance.
2. Push up into a standing position.
3. Step forward with weak leg first, putting weight on palms of the hands.
4. Place a firm grip on both sides of the walker.

15. The ICU nurse comes into Bill's room one afternoon and observes Bill flailing his hands in anger and repeating the word "mad." What action(s) is/are best by the nurse? Select all that apply.

1. Provide a safe environment.
2. Support Bill during uncontrollable outbursts.
3. Give Bill alone time in his room.
4. Encourage Bill to express his feelings.
5. Sit and listen to Bill's frustrations.

It has been a few days since Bill's stroke and procedure and Margie hasn't left his side. His condition has stabilized, and he is being transferred to the medical-surgical unit. The indwelling urinary catheter has been removed and Bill has been incontinent of urine. Margie notices that Bill has a difficult time swallowing and coughs a lot. He doesn't eat much of his meals. She voices concern about Bill becoming weak. The nurse reviews the labs and sees that the serum albumin, total protein, and iron levels are low.

16. Give an SBAR hand-off report from the ICU nurse to the medical-surgical nurse.

S - _____

B - _____

A - _____

R - _____

Clinical Hint:
 S - Situation
 B - Background
 A - Assessment
 R - Recommendation

17. Bill is transferred to a new room in the medical-surgical unit. The health care provider prescribed to stop the heparin drip and start Bill on clopidogrel. Fill in the missing pieces of information in the table.

Medication	Class of Medication	Mechanism of Action	Teaching Points
Clopidogrel 75 mg PO daily			Increases the risk of bruising and bleeding.

The nurse is reviewing additional prescriptions written by the health care provider.

Nurse Think HEALTHCARE SYSTEM		Name: Bill Michaelson Health Care Provider: John Dally, MD Code Status: Full Code	Age: 74 years Allergies: Latex
HEALTH CARE PROVIDER PRESCRIPTIONS			
Medical Surgical unit June 18 1315	<ol style="list-style-type: none">1. NPO after midnight.2. Swallow evaluation by speech therapy to evaluate the need for a gastrostomy tube.3. Interventional Radiology for gastrostomy tube insertion if indicated.4. Glucose monitoring before meals and at bedtime.5. Fall precautions.		

Bill has a swallow evaluation with speech therapy and does not pass. The speech therapist feels that Bill is at high risk for aspiration and recommends a percutaneous gastrostomy tube insertion in interventional radiology. The provider makes Bill NPO.

18. Margie is concerned and asks the nurse to explain the gastrostomy tube. How should the nurse respond? Select all that apply.

1. "It is a tube that comes out of the abdomen."
2. "It is used for nutritional feedings since Bill has trouble swallowing."
3. "Bill will need to use this tube for feedings until he gets stronger."
4. "Since Bill cannot swallow, the tube will be permanent."
5. "Liquid nutrition will be administered through the tube."

The charge nurse is making rounds on the clients on the medical-surgical unit and notices this sign on Bill's door.

19. What safety precaution(s) must be in place for fall-risk clients? Select all that apply.

1. Bed kept in the lowest position at all times.
2. Place the call light and other necessities within reach.
3. Raise the four side rails on the bed.
4. Use bed or chair alarms at all times.
5. Be sure that the clients ambulate with assistance.



After a few days, Bill is discharged from the hospital. The physical therapist suggests Bill be released to a skilled nursing facility for aggressive therapy.

20. Compare and contrast a skilled nursing facility and nursing home.
