

#1 Complete the following Questions:

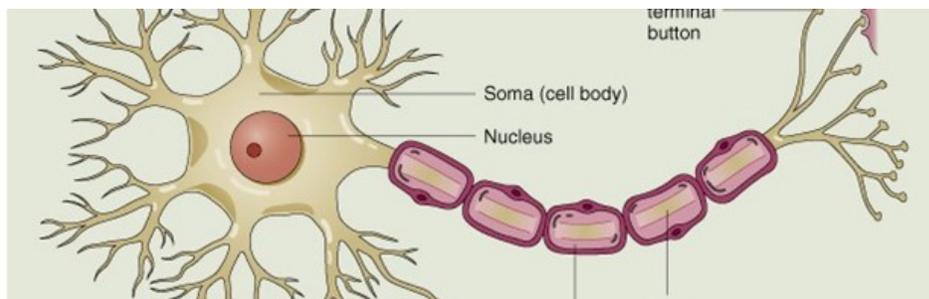
1. Abnormal flexion posturing term _____ decerebrate flexion _____
2. Abnormal extension posturing term _____ decerebrate extension _____
3. Which one of the above is worse and why? Damage to the brain stem can present as decerebrate posturing. The medulla is at the base of the brain stem and controls breathing and heart rhythm.
4. Which of the following parts of a neuron transmits impulses away from the cell body?
 - a. Dendrite
 - b. Axon
 - c. Neurolemma
 - d. Synapse
5. Which part of the brain controls breathing?
 - a. Medulla
 - b. Cerebellum
 - c. Cerebrum
 - d. Thalamus
6. When caring for a patient who has just undergone a lumbar puncture, which of the following nursing actions takes the highest priority?
 - a. Have the patient lie flat for 6-8 hours
 - b. Keep the patient NPO for 4 hours
 - c. Monitor the patient's pedal pulses every 4 hours
 - d. Encourage the patient to cough and deep breathe
7. What type of diuretic is Mannitol? _____ It is used for the treatment of ICP and eyes. Administered via IV in a healthcare setting. _____
8. Which of the following blood pressure changes alerts the nurse to increasing ICP, and should be reported immediately?
 - a. Gradual increase
 - b. Rapid drop followed by gradual increase
 - c. Widening pulse pressure
 - d. Rapid fluctuations

9. Label 3 structures on the neuron (image) and the functions of each

Cell body-energy store for activity

Membrane-controls substances in out of the cell.

Axon terminal-electrical signals



Matching

10. ___E___Aphasia

11. ___C___Dysphagia

12. ___A___Hemiplegia

13. ___B___Diplopia

14. ___D___Ataxia

A. Paralyzed on one side of the body

B. Double vision

C. Difficulty swallowing

D. Imbalanced, staggering gait

E. In ability to speak or understand language

#2 Complete each table:

Early Signs and Symptoms of Increased ICP	Late Signs and Symptoms of Increased ICP
disorientation	Stupor or coma
Slurred speech	Abnormal posturing
headache	Pupil changes- one may be different or blown
confusion	

Nursing Interventions to help decrease or at least not increase ICP	Thing to avoid with a patient who has increased ICP
HOB at or higher than 30 degrees	lifting
Avoid suction	Blowing nose
Provide laxatives or stool softeners to ease bowel straining.	Hip flexion and extension
Monitor stimuli	HOB less than 30 degrees
Nuerostatus checks/glasgow coma to monitor LOC	Avoid valsava maneuver
	Don't strain during bowel movement
	Do not wear restrictive clothing

#3 Utilize the powerpoint notes, <https://nurse.org/articles/glasgow-coma-scale/> or <https://www.brainline.org/article/what-glasgow-coma-scale> to complete following practice problems.

- 15
- 8
- 13
- 7
- 12
- 3
- 7
- 11

Patient Description	GCS score
Adult, spontaneously looks around. When you speak to the patient, they can tell you who they are, where they are and why, and the date, and obey simple commands.	15
Adult, opens eyes and extends left elbow when you put pressure on left nail bed. No response on the right. Makes no sounds, and opens eyes in response to nail bed pressure.	8
Adult, can obey simple commands and opens their eyes when they hear you speak. They can talk to you in sentences and seem a little confused and unsure of where they are.	13
Adult, opens their eyes when they hear you shouting for help. They groan and make sounds which you cannot recognise as words. They do not respond to pain.	7
Adult, moves hand towards head when you apply pressure above the eye socket. They are disoriented but able to form sentences. They open their eyes in response to speech.	12
Adult, unable to speak or open eyes, and has no response to pain.	3
Adult, flexes their elbow and wrist when you put pressure on the nail bed. They do not open their eyes at all. They make grunting noises but no words.	7
Infant, extends its elbows in response to pain, is inconsistently inconsolable and moans, and opens its eyes in response to pain.	11
Adult, extends their elbow when you put pressure on the nail bed. They can talk in sentences and are disorientated. They are unable to open their eyes.	10
Adult, moves their hand away when you apply pressure to the nail bed. The patient can make words but not form sentences. They open their eyes to pain, but not to speech.	10
Adult, opens their eyes when you say their name, and speaks to you in words that make no sense. When you apply pressure on their nail bed, they move their arm away.	10
Adult, opens eyes when you speak to them, and can hold a conversation, though seems disorientated. Patient flexes elbow and wrist when you put pressure on the nail bed.	11

What is the worse GCS score a person can have?

3

What score do we usually need intubate as they cannot protect their airway anymore? 8 or less is at high risk.

A score of above 11 or greater is good prognosis for recovery?

#4 CVA

Two types:

_Ischemic: caused by thrombotic or embolic blockage of blood flow to brain (83%)

_Hemorrhagic: bleeding into brain tissues (17%)

Right CVA will have left sided paralysis and defects of the

___left___ visual field.

Left-sided CVA will right___sided visual field loss and hemiparesis occurs on the ___right___ side.

Discuss the 3 causes of CVA:

- 1.high blood pressure
 - 2.diabetes-effects all body systems
 - 3.smoking
- Heart disease

Blood thinners, oral contraception, family, age, atrial flutter/afib

Warning signs of a stroke:

Slurred speech

Weakness

Confusion

Difficulty in speaking/finding words

Drop to one side of the face or other

Numbness in limbs

CVA Management: Medical, Surgical and Nursing

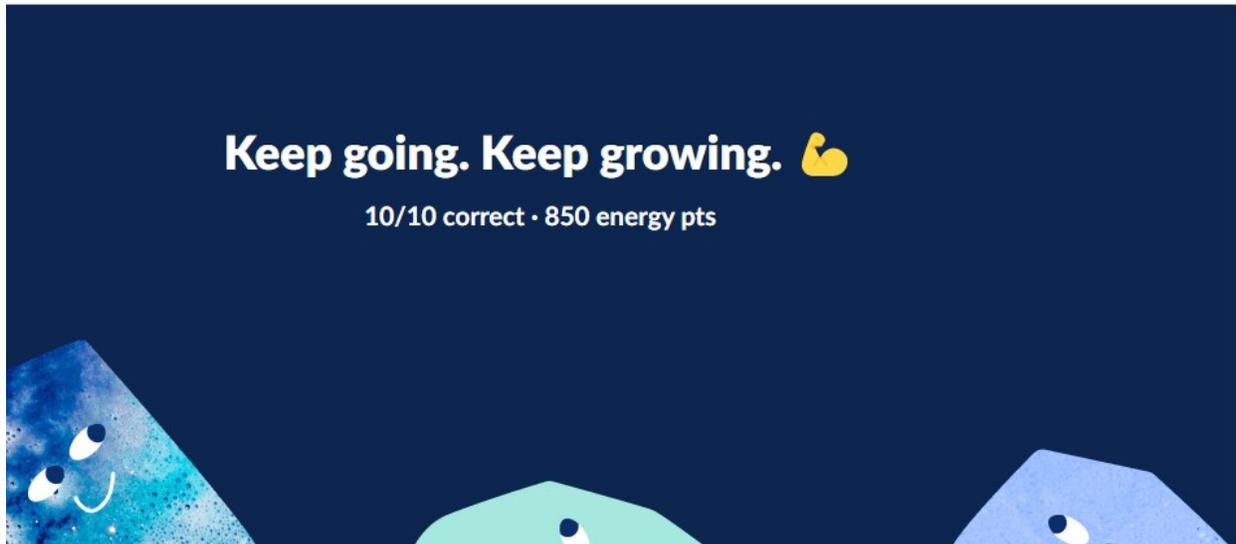
	Type: Ischemic	Type: Hemorrhagic
Medical	Tissue plasminogen activator CT/MRI, labs be sure labs/vitals are in range before administering TPA.	CT/MRI- DO NOT ADMINISTER TPA, labs
Surgical	Embolectomy/clot removal via catheter	Resection to decompress spinal cord
Nursing	Monitor vital signs and LOC- administer blood pressure and glucose medications. Monitor for bleeding. NIH stroke scale, fall watch/bed rest- no IM or IV sticks for bleeding. Monitor ICP	Comfort- monitor vital signs and LOC- administer meds as directed. NIH stroke scale Bed rest. monitor ICP

Go to this website and complete the 10 questions on Stroke – once you achieve an 80% or higher – take a screenshot and paste it below

<https://www.khanacademy.org/test-prep/nclex-rn/nclex-practice-questions/nclex-rn-questions/e/nclex-rn-questions-on-stroke-1-1>

NCLEX-RN questions on stroke 1

 Google Classroom  Facebook  Twitter  Email



#5 Answer the following questions:

1. What substances does the brain allow to cross the blood brain barrier?

Oxygen, lipids and water with a positive charge- barbiturates will cross the blood brain barrier

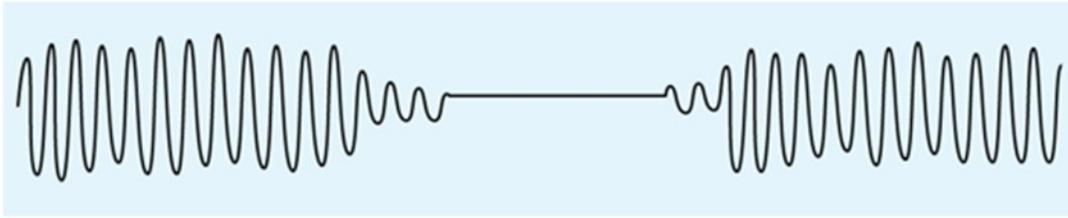
2. What substances does the brain not allow to cross the blood brain barrier?

Hydrophilic or large molecule lipids

3. Pattern of breathing noted below – when and why might you see this

Biots breathing pattern. Caused from stroke. Breathing pattern has periods of apnea begins again when stimuli or a buildup of CO₂ triggers the body to restart to breath. This is often seen in stroke patients.

Airflow



4. 3 Signs of skull Fracture that you may see in a patient?
Linear
Basilar
Depressed with or without break of skin
5. What is a positive Babinski sign and is it normal or abnormal? Abnormal- toes open
6. This is the “worst headache of my life”, it comes on severe and sudden could indicate what kind of hematoma?
Subarachnoid hematoma- aneurysm
7. Will a lumbar or cervical spinal cord injury have more damage to the patient? Why?
Cervical spinal injury could be worse depended upon the location of the damage. The medulla controls breathing, heart rhythm and are basic for survival and is located at the base of the spinal stem. Dependent upon the damage, the damage will be felt below it.
8. What is the most critical assessment and earliest indicator of changes for neurological patients? Monitor level of consciousness/Glasgow coma scale. Changes from baseline can indicate changes.
9. What is Cushing’s Triad? When will you see this? Intracranial pressure- increased systolic blood pressure, decreased pulse, and decreased respiration.