NRS 455 Topic 2 Case Study Mrs T

Student Name

Program Name or Degree Name (e.g., Bachelor of Science in Psychology), University

COURSE XXX: Title of Course

Instructor Name

Month XX, 2024

Case Study: Mrs. T.

Directions: Read the case study below. Evaluate the information and formulate a conclusion based on your evaluation. Complete the critical thinking table and submit this completed template to the assignment dropbox.

Case Study: Mrs. T.

An RN-BSN-prepared nurse must demonstrate an enhanced understanding of the pathophysiological processes of disease, the clinical manifestations and treatment protocols, and how they affect clients across the lifespan.

Evaluate Mrs. T.'s health history and medical information, which are presented below.

Health History and Medical Information

Mrs. T., a 42-year-old female, has been living at home with her two high school-age children, husband, and dog. She is a schoolteacher who works full-time teaching at the local grade school. She tries to be active by walking with her husband and dog for 20 minutes on the weekend but is starting to add weight as she gets older. She has no known allergies. She is a pack-a-day smoker and drinks three glasses of wine/per night after work. She tries to eat healthy but likes to eat out at fast food restaurants to avoid having to cook.

Medical history includes atrial fibrillation controlled with beta blocker, hypercholesterolemia, mild anemia related to heavy menses, and migraines. Current medications include:

1. Metoprolol 50mg daily
2. Pravastatin 40 mg at bedtime daily for cholesterol
3. Birth control pill Microgestin Fe in the AM
4. Amitriptyline 20 mg/daily for migraines

Case Scenario

You are the school nurse where Mrs. T. works. While at recess duty, another teacher runs up to you and reports that Mrs. T. is not acting like herself. When you approach, you see her sitting on a bench mumbling something to the kids gathered around her. She has dropped her cell phone on the ground, and her right arm appears limp. You try asking her questions, and you notice the right side of her face is slackened, and she does not seem to be making sense when talking. You call an ambulance and try to walk her back to your office, but she does not move well. You reassure her and try to determine if anything occurred prior to her loss of speech and movement. The other teachers say it came on suddenly, within the last 5 minutes. Mrs. T. shakes her head no to pain.

Objective Data – Completed by Ambulance Personal:

1. Temperature: 36.5 degrees C
2. BP 184/92, HR 101, RR 24, Pox 99%

3. Blood Glucose = 107
4. Positive FAST & VAN score, NIHSS = 12
5. Height: 62 inches; Weight 89 kg

Laboratory/Test Results - On Arrival to the Emergency Department (Initial Results)

1. WBC: 9.4 (1,000/uL)
2. INR – 0.7
3. CT Head is normal.
4. Negative pregnancy test
5. Cholesterol – 247, Triglycerides - 302

Critical Thinking Table

Clinical Manifestations *Describe the clinical manifestations present in Mrs. T., focusing on what is normal and abnormal and how this relates to her current condition.*	
Subjective	

Objective	The right arm appears to be flaccid The right side of the face is flaccid Her cell phone was dropped Lack of agility The blood pressure is 184/92 mmHg, heart rate 101 beats per minute, respiration 24 breaths per minute, and oxygen saturation is 99% The blood glucose level is 107. The FAST &VAN score indicates a positive result.
Primary and Secondary Diagnoses *Discuss the primary and secondary medical diagnoses that should be considered for Mrs. T. and why you chose this diagnosis.*	
Primary medical diagnosis and why you chose this diagnosis.	The diagnosis of ischemic stroke is that ischemic stroke happens when a clot or fatty plaque blocks a blood artery in the brain, cutting off blood supply to certain regions of the brain, American Stroke Association (2021). Because of this obstruction, the brain does not receive enough oxygen and

	nutrients through the bloodstream. Within minutes of losing blood flow, the brain cells start to die. failure to restore blood flow rapidly enough can cause irreversible brain damage or death. This disease process is determined by the rapid onset of the symptoms, a positive FAST score, and an NIHSS score of 12, indicating substantial neurological impairment.
Secondary medical diagnosis and why you chose this diagnosis.	The medical background of Mrs. T. suggests that atrial fibrillation may have had a role in causing the stroke, Jauch, E.C., et al.(2019). Atrial fibrillation, or A-fib for short, is an irregular heartbeat that happens when the electrical signals sent by the heart's upper chambers (the atria) are fast and not sync with one another.
Formulate a nursing diagnosis from the medical diagnoses	Speech impairment is evidence of impaired verbal communication due to an ischemic stroke. When blood flow to the brain is interrupted, it causes a condition known as an ischemic stroke, Jauch, E.C., et al. (2019). The inability to produce or comprehend written or spoken words is known as aphasia. Strokes affecting the linguistic regions of the left hemisphere are a common etiology. After a stroke, aphasia can appear quickly or progress subtly. What causes and how much damage to the brain determines the degree of aphasia.
Pathophysiological Changes *Explain the pathophysiological changes in Mrs. T.*	

What pathophysiological changes would you expect to be happening to Mrs. T.?	Two internal carotid arteries control blood flow to the brain from the front, while two vertebral arteries form the circle of Willis from the back. It occurs when brain tissue dies from ischemia or infarction when the amount of blood flowing to the area is insufficient to fulfill the metabolic demands of the cells. An abrupt cessation of blood circulation to the brain leads to cellular death and neurological deficits. Neurological deficits, potential cognitive decline, and alteration in motor abilities are all anticipated.
How will pathophysiological changes transition in the subacute phase after diagnosis and initial	A condition characterized by a rapid reduction in cerebral blood, leading to cell death and neurological deficits.

treatment?	Changes in motor function, cognitive impairment, and neurological impairments are all things that people can anticipate. During the acute phase, we talk about neuroplasticity, recovery and rehabilitation processes, and possible residual deficits.
Health Status Effect *Describe the effects Mrs. T.'s current health status may have on her.*	
Describe the physical, psychological, and emotional effects Mrs. T.'s current health status may have on her.	Patients with this condition are often upset when they are getting better, as a common response to this tragic event, Mrs. T may encounter increased depression. Symptoms of mental illness may include a lack of stability in mood, hostility, impatience, rage, and an inability to work with others. American Stroke Association (2021) Impairments in motor skills, which may result in reduced independence. Personality Disorder lacks self-restraint. Delicate emotional state Reduced ability to handle difficult situations, Depressive disorder' Exclusion from, Antipathy, dread, and fury. Dealing with a lifestyle change while fretting over a recurrence might lead to a feeling of isolation. Mrs. T may find it more difficult to fulfill her family role due

	to her reduced capacity to engage in family activities.
Discuss the impact it can have on her role in the family.	Impaired speech, limited physical abilities, weakness on one side of the body, trouble grasping or retaining objects, and a slowed capacity to communicate are the most preventable forms of impairment following a stroke, American Stroke Association. (2021)
Treatments and Support *Discuss treatments and support that can be completed for Mrs. T.*	
Discuss the immediate treatments that can be completed for Mrs. T.	Administration of thrombolytic therapy, if it is accessible. Regulation of blood pressure. Regulation of blood glucose levels. Admission to a stroke unit for medical attention and

	monitoring.
Describe the long-term support she may need to return to the *baseline activity level.*	Rehabilitation therapies include speech, occupational, and physical therapy. Secondary preventive drugs include anticoagulants and antiplatelets. Smoking cessation, dietary modifications, and consistent physical activity are all instances of lifestyle enhancements, according to the American Stroke Association. (2021). Neurologists, physical therapists, occupational therapists, speech therapists, and social workers collectively form the multidisciplinary team. Spiritual support, emotional and psychological support.
Explain how the interdisciplinary team is utilized to help her family support and cope with her diagnosis.	When dealing with patients who have had an acute ischemic stroke, Powers W.J. (2018), it is essential to employ a multidisciplinary team approach. A wide range of healthcare experts, each with specialization, comprise this team. The primary objective is to offer all-encompassing care that attends to the patient's and their family's emotional, psychological, and physiological requirements, care that addresses all aspects of the patient's health and well-being.

References:

American Stroke Association. (2021). Guidelines for the early management of patients with acute ischemic stroke. *Stroke, 52*(12), e364-e467.

Jauch, E. C. (2019). Guidelines for the early management of patients with acute Ischemic Stroke: A guideline for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke, 44*(3),870–947.

Powers, W.J. (2018). Guidelines for the early management of patients with Acute Ischemic Stroke: 2019 Update to the 2018 guidelines for the early management of acute ischemic stroke: A guideline for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke, 50*(12), e344-e344-e418.