N311 Care Plan 1

Bethany Waugh

Lakeview College of Nursing

N311: Foundations of Professional Practice

Clinical Instructor Name:

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Date:

09/24/2024

Demographics (5 points)

Date of Admission 09/21/2024	Client Initials V.J.	Age 63	Gender Female
Race/Ethnicity African American	Occupation Home Health Aid	Marital Status Married	Allergies Penicillins/Jardiance (Empagliflozin)
Code Status Full	Height 5'2.5"	Weight 317lb (144.2 kg)	

Medical History (5 Points)

Past Medical History: Sleep apnea, pulmonary thromboembolism, morbid obesity, sciatic leg pain, heart murmur, hypercholesterolemia, idiopathic acute pancreatitis, acute respiratory failure with hypoxia, chronic bronchitis, arterio venous malformation (brain), fatty liver, asthma, eating disorder, diabetes mellitus

Past Surgical History: tubal ligation, cholecystectomy, colonoscopy

Family History: AIDS/HIV in brother/brother/sister, congestive heart failure in father, sudden cardiac death in brother, diabetes in mother, heart disease in mother, sarcoidosis in mother

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): Started smoking 34 years ago, quit 14 years ago, 20 pack – year smoking history. Never used smokeless tobacco. Does not currently use alcohol. Does not use drugs.

Admission Assessment

Chief Complaint (2 points): shortness of breath, chest tightness, cough

History of Present Illness – OLD CARTS (10 points):

This is a reoccurring problem for the patient; however, this episode came on suddenly. These episodes occur intermittently and are getting worse. Upon admission, the patient reported pain as a 5/10, and reported symptoms of cough, malaise/fatigue, shortness of breath, and weakness. Patient reports that symptoms are worsened/aggravated by coughing and exertion. Patient tried

resting to relieve symptoms, but this provided no relief. Nebulized bronchodilators and IV steroids were started on admission to relieve the pain and symptoms, which did provide relief.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): asthma exacerbation

Secondary Diagnosis (if applicable): hypertension, GERD with esophagitis , diabetes mellitus, hyperlipidemia

Pathophysiology

Pathophysiology of the Disease, APA format (20 points):

Patients with asthma may not experience the symptoms of asthma daily, but on occasion they may experience a rapid onset of severe and terrifying symptoms called an asthma attack. The most common symptoms of an asthma attack are an intense, dry cough, a whistling wheezing sound upon inhalation and exhalation, difficulty breathing and chest tightness (American Thoracic Society, 2022). Asthma attacks are usually brought on by allergies or irritants. According to the American Thoracic Society, the most frequently seen causes of an asthma attack are allergies such as pet dander, molds or pollen, as well as environmental irritants such pollution, chemicals from cleaning products, cigarette smoke, and weather changes; with lung or sinus infections being the most common cause of asthma induced hospitalizations (American Thoracic Society, 2022).

According to Capriotti (2020), asthma is defined as “a chronic inflammatory disorder that causes reversible airway constriction because of bronchial hyperactivity” (Capriotti, 2020, p. 501). In simpler terms this means that the bronchioles in the lungs become constricted and narrow, while also producing an excess of extra thick mucus. The muscles around the

bronchioles also constrict causing bronchospasm. Capriotti goes on to explain that the main cells involved in an asthma attack are the Th1 and Th2 helper T lymphocytes (Capriotti, 2020). The Th1 cells are stimulated by allergens or other irritants and help B cells turn into the plasma cells that manufacture immunoglobin E (IgE), and the Th2 cells attract three types of white blood cells (mast cells, eosinophils, and basophils), that cause inflammation (Capriotti, 2020). The narrowing and hyperactivity of the bronchioles are caused by leukotrienes, while the bronchospasm and inflammation experienced during an asthma attack are caused by Histamine (Capriotti, 2020).

The most common way to diagnose asthma is with a spirometry test. A spirometry test deciphers how well a patient's lungs are functioning by having them inhale deeply, followed by a strong exhalation into a tube connected into a spirometer (Mayo Clinic, 2024). Sometimes the patient is asked to inhale a drug that opens the bronchioles and then re-attempt the test. If the physician feels that the patient's symptoms may be worsened with physical activity the patient may be asked to perform exercises and repeat the spirometry test (Mayo Clinic, 2024). This combination is called a challenge test (Mayo Clinic, 2024).

Pathophysiology References (2) (APA):

References

American Thoracic Society. (2022, October). *What is Asthma?* www.thoracic.org. https://www.thoracic.org/patients/patient-resources/resources/asthma.pdf

Capriotti, T. (2020). *Pathophysiology: Introductory Concepts and Clinical Perspectives*. F.A. Davis.

Mayo Clinic Staff. (2024, January 25th). *Asthma: Steps in Testing and Diagnosis*. www.mayoclinic.org. https://www.mayoclinic.org/diseases-conditions/asthma/in-depth/asthma/art-20045198

Vital Signs, 1 set (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
3:15	96	136/77	24	95.6	93

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
3:15	1-10		0	Patient reported feeling no pain	Nebulized bronchodilators and IV steroids were started on admission to relieve the original pain and symptoms.