Medications

Tylenol(acetaminophen)/Pain relief/ Pain / Temporary use only, may cause hepatic damage

ProAir HFA (Albuterol sulfate)/ Bronchodilator/Asthma/ Monitor serum potassium level, may develop drug tolerance

Amrix (Cyclobenzaprine hydrochloride)/ Skeletal muscle relaxant/ Muscle Spasms/ Use cyclobenzaprine cautiously in patients with a history of low seizure threshold, avoid giving drug to elderly patients, if possible, because of its anticholinergic

Glucose (dextrose)/ Glucose-elevating agent/ Insulin- induced hypoglycemia/ assess for renal failure

Melatonin (N-acetyl-5- methoxy tryptamine)/ Acetamides/ Insomnia/ assess for alcohol usage and use of other CNS depressants

Lovenox (Enoxaparin sodium)/ Anticoagulant/ Prevent DVT/ Assess for prosthetic heart and bleeding diathesis

Invanz (Ertapenem sodium)/ Antibiotic/ Sepsis/ Obtain sputum and urine for culture sensitivity testing, expect to start therapy before results are available Sepsis

Toprol- XL(Metoprolol succinate)/ Antianginal/ Helps reduce blood pressure/ Use cautiously with

Lab Values/Diagnostics

N/A

All WNL

Demographic Data

Date of Admission:9/22/21

Admission Diagnosis/Chief Complaint: Sepsis/ Pain in all extremities and face

Age:23

Gender: Female

Race/Ethnicity: White

Allergies: Grape extract(hives), Aloe vera(rash)

Code Status: Full code

Height in cm:4’11”

Admission History

On September 22, 2021 the patient was admitted to Carle Foundation Hospital for pain in all extremities and face, fever, malaise, and dizziness. Her illness is moderate to severe. There are no known aggravating factors. Relieving factors are sitting in the chair, instead of laying in the bed. She is currently being treated at Carle Foundation Hospital with prescribed medication. Because the patient is receiving pain medication as needed, she stated “I am not in any pain right now. I feel better.”

Medical History

Previous Medical History: Asthma, Chronic PTSD, Diabetes Mellitus, Asperger’s, Hypothyroidism, Irritable Bowel Syndrome w/ Diarrhea

Prior Hospitalizations: N/A

Previous Surgical History: Appendectomy 9/10/2014, Lymph Node Dissection 04/22/2016

Social History: Former smoker (cigars), No history of drug or alcohol use

Pathophysiology

Disease process: The inflammatory reaction is mediated by the release of cytokines, including tumor necrosis factor-alpha, interleukins, and prostaglandins, from neutrophils and macrophages (Martini et. al., 2018). Once the cytokines are activated, fibrinolysis is inhibited. Overlapping processes result in microvascular thrombosis; thrombosis is one potential factor producing organ dysfunction (Martini et. al., 2018). Activation of the coagulation system leads to consumption of endogenous anticoagulants (e.g., protein C and antithrombin); this may be an important factor in the development of microvascular coagulation (Martini et. al., 2018). Sepsis is a body- wide infection that overwhelms the immune system and cause severe multi organ compromise (Capriotti & Frizzell, 2016).

S/S of disease: Symptoms of severe sepsis include hypoxemia, oliguria, and systolic hypertension (Martini et al., 2018). Severe symptoms often do not appear until significant damage has occurred, and they usually worsen over time. (Martini et al., 2018). Some physical findings found in sepsis are poor perfusion, including cool skin, cool extremities, and delayed capillary refill (cold shock) (Martini et al., 2018). Other physical findings may include decreased urine output and cyanosis (blueish discoloration of the lips and/or digits) (Martini et al., 2018).

Method of Diagnosis: Diagnosing sepsis can be difficult. We pay attention to high or low body temperature, tachycardia, and dyspnea. Knowing the normal ranges of these vital signs are helpful when trying to determine the patient’s diagnosis of sepsis.

Treatment of disease: The most common form of treatment for sepsis is an antibiotic. Our patient was given an antibiotic when sepsis was confirmed. She is currently being treated with an antibiotic, Invanz, for the sepsis infection.

Active Orders

Keep oxygen levels above 94%- maldistribution of blood flow and disturbances in microcirculation, seen in septic patients, can diminish oxygen uptake and extraction.

Administer antibiotics- Appropriate and timely antibiotic treatment is one of the cornerstones of therapy to prevent death and life-threatening complications

Vaso pressors-treatment of shock induced hypertension to improve organ profusion pressure

Physical Exam/Assessment

General: Alert and Oriented x 4, No distress noted, adequately groomed and dressed appropriately

Neurological:

Pt is Lethargic

All other neurological assessments are in WNL

Most recent VS (include date/time and highlight if abnormal):

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0700	115	133/70	24	98.3	92
1100	120	120/80	22	98.4	92

Pain and pain scale used: Number scale used 1-10, 1 being the least amount of pain and 10 being the worst pain

0700	1-10	Non-specific	0	n/a	None
0900	1-10	Head	5	Headache, dull pain	Notified RN

Nursing Diagnosis 1	Nursing Diagnosis 2	Nursing Diagnosis 3
Malnutrition related to poor nutrition as evidenced by obesity	Risk for shock related to infection as evidenced by sepsis	Risk for impaired gas immobility related to use of nasal cannula as evidenced by O2 saturation less than 95.
Rationale The patient is obese.	**Rationale** The patient had sepsis	**Rationale** The patient has oxygen saturation of 92
Interventions **Intervention 1:** Dietician consult **Intervention 2:** Meal intake should be documented at every meal	**Interventions** **Intervention 1:** Check temperature regularly for signs of infection **Intervention 2:** Patient will be assessed for feelings of malaise regularly	**Interventions** **Intervention 1:** Nurse will have nasal cannula available for patient to use **Intervention 2:** Nurse will assess the oxygen saturations regularly to make sure the oxygen therapy is enough
Evaluation of Interventions Patient is appreciative of the nurses' actions and will work with a nutritionist to make some lifestyle changes. The client's response is appropriate. She is will to do what is necessary to meet her goals and to be healthy.	**Evaluation of Interventions** The patient is appreciative of the nurse showing her how to check her vitals. The client is willing to participate in keeping track of her vitals	**Evaluation of Interventions** Nurse will have nasal cannula available for patient to use Nurse will assess the oxygen saturations regularly to make sure the oxygen therapy is enough

References (3) (APA):

Capriotti, T.M., & Frizzell, J.P., "Pathophysiology: Introductory Concepts

and Clinical Perspectives" (2016).

Jacobi J. (2018). Pathophysiology of sepsis. *American journal of health-system pharmacy AJHP: official journal of the American Society of Health-System Pharmacists*, *59 Suppl 1*, S3–S8. https://doi.org/10.1093/ajhp/59.suppl_1.S3

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