

N433 Care Plan #2

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission 6-26-20	Patient Initials C.S.	Age (in years & months) 6 years & 1 month	Gender Male
Code Status Full code	Weight (in kg) 21kg	BMI 15.4	Allergies/Sensitivities (include reactions) Perfumes, dyes, and peanuts - anaphylaxis

Medical History (5 Points)

Past Medical History: no past medical history

Illnesses: no past medical illnesses

Hospitalizations: no past hospitalizations

Past Surgical History: no past surgical history

Immunizations: up-to-date

Birth History: unable to assess

Complications (if any): unable to assess

Assistive Devices: n/a

Living Situation: the patient stays with aunt and uncle while parents are overseas

Admission Assessment

Chief Complaint (2 points): "Difficulty breathing after eating a cookie."

Other Co-Existing Conditions (if any): n/a

Pertinent Events during this admission/hospitalization (1 point): The patient ate a cookie with peanuts causing him to have an allergic reaction

History of present Illness (10 points): (o) The patient arrived in the emergency room at 1500 after having symptoms of an allergic reaction. (l) The aunt states the patient "was eating a cookie and then got difficulty breathing." (d) The patient's symptoms have lasted 30 minutes. (c) The characteristics of the allergic reaction include tachypnea, dyspnea, and a mild stridor. (a) aggravating factors causing this reaction are allergens such as peanuts, perfumes, and dyes. (r) Relieving factors for this patient limited activity and medication therapy. (t) Treatment for this patient includes oxygen therapy to keep O₂ above 94%, vasoconstricting medication, bronchodilation medication, antihistamine medication, and a steroid medication, and frequent vital sign monitoring.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Anaphylaxis

Secondary Diagnosis (if applicable): n/a

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

Anaphylaxis is a severe reaction caused by an allergen. When an allergen comes in contact with the body, an automatic response occurs, causing a reaction. The complication of this condition can be systemic and life-threatening. If this condition presented signs of a systemic reaction, the skin, respiratory, gastrointestinal, and cardiovascular systems may be affected. An anaphylactic episode can occur from 2 minutes to 2 hours after being exposed to an allergen. Education is essential for this condition to prevent reoccurrence by teaching patients and patient families about the risks from exposure to allergens.

Stabilizing an airway is of high priority for this condition, maintained by medication therapy and oxygen. The severity of this condition requires an injection of epinephrine and followed monitoring with treatment. Signs of anaphylaxis are skin reactions such as flushed skin, itching, or color changes, hypotension, constriction of airways, wheezing and difficulty breathing, a weak and rapid pulse, dizziness, fainting, nausea, vomiting, and diarrhea.

The immune response from antibodies causes anaphylaxis. When a foreign substance affects an individual's immune system, antibodies react. The most common cause of anaphylaxis in children is a food allergy. An individual may be at higher risk for anaphylaxis if they have been diagnosed with asthma or have allergies. Anaphylaxis is a severe condition that can be life-threatening because of its effects on respiratory and cardiac systems.

This condition does not require lab tests or imaging to diagnose. A possible procedure to do is a hormone-level test to check the allergy level or a skin test to identify the allergen. Anaphylaxis diagnosis will include symptoms of mental confusion, throat swelling, weakness, dizziness, cyanosis, tachycardia, facial swelling, hypotension, wheezing, and hives.

Pathophysiology References (2) (APA):

Winnie Yu, A. K. A. (1997, January 10). *Anaphylaxis*. Healthline. <https://www.healthline.com/health/anaphylaxis#prevention>

Anaphylaxis - Symptoms and causes. (2019, September 14). Mayo Clinic.

<https://www.mayoclinic.org/diseases-conditions/anaphylaxis/symptoms-causes/syc-20351468>

Active Orders (2 points)

Order(s)	Comments/Results/Completion
Activity:	Up ad-lib as tolerated
Diet/Nutrition:	Regular diet
Frequent Assessments:	continuous pulse oximeter
Labs/Diagnostic Tests:	ECG for cardiac/apnea monitoring
Treatments:	The nasal cannula 2 L O2/min, may switch to nonrebreather to maintain SpO2 > 94%
Other:	Obtain IV access
New Order(s) for Clinical Day	
Order(s)	Comments/Results/Completion
Monitor vital signs every 5 minutes	
Epinephrine 0.3mg IV Stat	Stat
Diphenhydramine 25mg IV	Stat
Ranitidine 20mg IV	Stat
Methylprednisolone 10mg IV	Once
NS 420ml IV over 30 minutes	One bolus

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range (specific to the age of the child)	Admission or Prior Value	Today's Value	Reason for Abnormal Value
RBC	4.2-5.4 * 10 ⁹ /L	n/a	n/a	
Hgb	13.5-17.5 g/dL	n/a	n/a	
Hct	40-45%	n/a	n/a	
Platelets	150-400 * 10 ⁹ /L	n/a	n/a	
WBC	4-11 * 10 ⁹ /L	n/a	n/a	
Neutrophils	1500-8500 mm ³	n/a	n/a	
Lymphocytes	2000-8000 mm ³	n/a	n/a	
Monocytes	28-825 mm ³	n/a	n/a	
Eosinophils	40-650 mm ³	n/a	n/a	
Basophils	7-140 mm ³	n/a	n/a	
Bands	<4%	n/a	n/a	

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission or Prior Value	Today's Value	Reason For Abnormal
Na-	133-143 mEq/L	n/a	n/a	
K+	3.6-4.6 mEq/L	n/a	n/a	
Cl-	101-111 mEq/L	n/a	n/a	

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Glucose	65-140 mg/dL	n/a	n/a	
BUN	8-23 mg/dL	n/a	n/a	
Creatinine	0.8-1.4 mg/dL	n/a	n/a	
Albumin	3.8-5.4 g/dL	n/a	n/a	
Total Protein	5.7-8.0 g/dL	n/a	n/a	
Calcium	8.5-10.9 mg/dL	n/a	n/a	
Bilirubin	< 1.0mg/dL	n/a	n/a	
Alk Phos	96-297 U/L	n/a	n/a	
AST	10-34U/L	n/a	n/a	
ALT	10-25 U/L	n/a	n/a	
Amylase	29-70 mcg/L	n/a	n/a	
Lipase	3-32 U/L	n/a	n/a	

Other Tests **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Admission or Prior Value	Today's Value	Reason for Abnormal
ESR	0.9 mm/hr	n/a	n/a	
CRP	0.30 mg/L	n/a	n/a	
Hgb A1c	4-6%	n/a	n/a	
TSH	0.55-5.31 mU/L	n/a	n/a	

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Admission or Prior Value	Today's Value	Reason for Abnormal
Color & Clarity	Yellow, clear	n/a	n/a	
pH	4.6-8.0	n/a	n/a	
Specific Gravity	1.000-1.030	n/a	n/a	
Glucose	70-99 mg/dL	n/a	n/a	
Protein	< 150 mg/day	n/a	n/a	
Ketones	< 3 mmol/l	n/a	n/a	
WBC	5,000-10,000 mcL	n/a	n/a	
RBC	4.0-5.5 mcL	n/a	n/a	
Leukoesterase	4.5-11 mcL	n/a	n/a	

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Admission or Prior Value	Today's Value	Explanation of Findings
Urine Culture	No growth	n/a	n/a	
Blood Culture	No growth	n/a	n/a	
Sputum Culture	No growth	n/a	n/a	
Stool Culture	No growth	n/a	n/a	
Respiratory ID Panel	No growth	n/a	n/a	

Lab Correlations Reference (APA):

Martin, P. B. (2020, May 14). *Normal Lab Values Reference Guide*.

Nurseslabs. <https://nurseslabs.com/normal-lab-values-nclex-nursing/>

Diagnostic Imaging

All Other Diagnostic Tests (5 points): ECG – Electrocardiogram

Diagnostic Test Correlation (5 points): Electrocardiogram is a safe and painless test that is used to check heart rhythm, view ischemia, diagnose a heart attack, and detect abnormalities with the heart. For this test, the patient will wear electrode patches that attach to the skin of the arms, legs, and chest. The electrodes pick up the electrical activity of the heart. Due to this patient's condition and the medication therapy that will be used, an ECG was in place to monitor the heart. The results for this patient showed sinus tachycardia.

Diagnostic Test Reference (APA):

Heart Disease and Electrocardiograms. (2007, January 1). WebMD.

<https://www.webmd.com/heart-disease/electrocardiogram-ekgs>

Current Medications (8 points)

****Complete ALL of your patient's medications****

Brand/Generic	Epipen (CAN) Epinephrine	Benadryl Diphenhydramine	Zantac Ranitidine	Medrol Methylprednisolone	Sodium Chloride Normal Saline 0.9%
Dose	0.3mg	25mg	20mg	10mg	420mL
Frequency	Once, stat	Once, stat	Once stat	Once	Bolus over 30 minutes
Route	IV	IV	IV	IV	IV
Classification	Antianaphylactic, bronchodilator, cardiac stimulant,	Antianaphylactic adjunct, antidyskinetic,	Antiulcer agent, gastric acid secretion	Anti-inflammatory, immunosuppressant	Electrolyte replenisher

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	vasopressor	antiemetic, antihistamine, antitussive, antivertigo	inhibitor		
Mechanism of Action	Stimulates beta receptors to constrict and dilate arteries, reverse of bronchoconstriction and edema, prevent the secretion of histamine, and inhibits the release of epinephrine	Binds to receptors to block histamine, inhibiting G.I., respiratory, and vascular smooth muscle contraction, reduces flares, itching, and wheals	Inhibits histamine which reduces gastric juices and irritation form G.I. mucosa	Binds to receptors to suppress inflammatory and immune responses	Buffers stomach acid by increasing pH of stomach contents
Reason Client Taking	To treat anaphylaxis – dyspnea	Allergic reaction	Allergic reaction	The immune response fan from an allergic reaction	Allergic reaction
Concentration Available	1:10000 solution	12.5mg	2mg	10mg	1000ml
Safe Dose Range Calculation	10mcg/kg x 3 doses	12.5-25mg every 4-6 hours	2-4mg	10-40mg	120ml-420ml
Maximum 24-hour Dose	300mcg/dose x3	150mg	50mg	120mg	1000ml
Contraindications (2)	Coronary insufficiency, shock	Hypersensitivity, MAO inhibitor therapy	Hypersensitivity, acute porphyria	Fungal infection, hypersensitivity	CHF, renal impairment
Side Effects/Adverse Reactions (2)	Arrhythmias, palpitations	Tachycardia, arrhythmias	Bronchospasm, drowsiness	Edema, hypertension	Tachycardia, dyspnea
Nursing Considerations (3)	Shake suspension before withdrawing, monitor for potassium imbalances, be aware of brands used for emergency supportive care and immediate	Discontinue 72 hours before skin test for allergies, if oral ingestion isn't possible to expect to give parenteral, keep container closed tightly to avoid exposure to light	Monitor Q.T. interval, assess effectiveness, monitor serum magnesium, potassium, and liver enzyme levels	Arrange a low-sodium diet with added potassium as prescribed, protect the patient from falling, use cautiously in patients with heart failure	Monitor for electrolyte imbalances, rapid infusion can cause cardiac arrest, monitor urine pH

	medical care				
Client Teaching needs (2)	Take the only recommended dose, notify the provider if vision gets blurry	Take with food to prevent G.I. complications, avoid injuries because of the CNS effects	Limit grapefruit juice, inform the provider if adverse reactions occur	Notify provider of dark tarry stools to tell the provider if adverse effects occur	Notify provider of adverse effects, only the take prescribed dose

Medication Reference (APA):

Jones & Bartlett Learning. (2018). *2018 Nurses drug handbook*.

Assessment

Physical Exam (18 points)

GENERAL (1 point): Alertness: Orientation: Distress: Overall appearance:	Alert, oriented, patient in distress, appropriate appearance
INTEGUMENTARY (2 points): Skin color: Character: Temperature: Turgor: Rashes: Bruises: Wounds: Braden Score: 22 Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:	Skin color consistent with ethnicity; the skin is dry, warm, and elastic without rashes, bruises, or wounds. No sweating noted. Saline lock in the left arm. Braden score of 22.
HEENT (1 point): Head/Neck: Ears: Eyes: Nose: Teeth: Thyroid:	Head and neck are symmetrical, facial features symmetrical, no deviations noted, ears pink and dry, no hearing deficits assessed, oral cavity pink and moist with no signs of dehydration, sclera of eyes presents white, no drainage noted.

<p>CARDIOVASCULAR (2 points): Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses: Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema:</p>	<p>S1 and S2, no signs of murmur, sinus tachycardia, pulses strong and equal bilaterally, capillary refill 5 seconds.</p>
<p>RESPIRATORY (2 points): Accessory muscle use: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Breath Sounds: Location, character</p>	<p>Mild stridor, even chest rise bilaterally, no airway obstruction noted. Increased respiratory effort and retractions assessed.</p>
<p>GASTROINTESTINAL (2 points): Diet at home: Current diet: Height (in cm): Auscultation bowel sounds: Last B.M.: Palpation: Pain, Mass, etc.: Inspection: Distention: Incisions: Scars: Drains: Wounds: Ostomy: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	<p>Regular diet at home, current diet regular as tolerated, 120 cm in height, bowel sounds active in all quadrants, unable to assess last B.M., no distention, incisions, scars, drains, or wounds noted.</p>
<p>GENITOURINARY (2 Points): Color: Character: Quantity of urine: Pain with urination: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: Size:</p>	<p>Yellow, clear, unable to assess the quantity</p>
<p>MUSCULOSKELETAL (2 points): Neurovascular status: ROM:</p>	<p>No supportive devices assessed, muscle strength and sensation equal and strong bilaterally, deep tendon reflexes within normal limits, no</p>

<p>Supportive devices: Strength: ADL Assistance: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Fall Risk: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Fall Score: 20 Activity/Mobility Status: Independent (up ad lib) <input type="checkbox"/> Needs assistance with equipment <input type="checkbox"/> Needs support to stand and walk <input type="checkbox"/></p>	<p>indications of clonus, activity up ad-lib as tolerated, fall score of 20 – low fall risk</p>
<p>NEUROLOGICAL (2 points): MAEW: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/> Orientation: Mental Status: Speech: Sensory: LOC:</p>	<p>Awake, normal cognitive, AOx4, speech clear, sensory is intact, alert and responsive, pupils 4mm and reactive bilaterally, EOM intact</p>
<p>PSYCHOSOCIAL/CULTURAL (2 points): Coping method(s) of caregiver(s): Social needs (transportation, food, medication assistance, home equipment/care): Personal/Family Data (Think about home environment, family structure, and available family support):</p>	<p>Next-to-kin provides coping methods, and social needs, supportive family environment, home environment may require additional teaching-related allergies</p>

Vital Signs, 1 set (2.5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1504	156bpm	109/73	25	37.1C	90%

Normal Vital Sign Ranges (2.5 points)
****Need to be specific to the age of the child****

Pulse Rate	75-118
Blood Pressure	97-120 systolic, 57-80 diastolic
Respiratory Rate	18-25 bpm
Temperature	35.5-37.5 C
Oxygen Saturation	97-99%

Normal Vital Sign Range Reference (APA):

Nall, R. R. N. (2017, March 20). *A Mom's Guide to Pediatric Vital Signs*. Healthline. <https://www.healthline.com/health/pediatric-vital-signs#toddlers>

Pain Assessment, two sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1504	Faces	n/a	0 – no pain	n/a	n/a
Evaluation of pain status <i>after</i> an intervention	n/a	n/a	n/a	n/a	n/a
Precipitating factors: n/a					
Physiological/behavioral signs: n/a					

Intake and Output (1 point)

Intake (in mL)	Output (in mL)
475 mL from IV	475mL from IV; unable to assess

Developmental Assessment (6 points)

Be sure to highlight the achievements of any milestone if noted in your child. Be sure to highlight any use of diversional activity if utilized during clinical. There should be a minimum of 3 descriptors under each heading

Age Appropriate Growth & Development Milestones

1. Gain 4-5lbs
2. Grow 2-3in
3. Adult teeth

Age Appropriate Diversional Activities

1. Run with ease

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2. Balance on one foot
3. Kick and throw a ball

Psychosocial Development:

Which of Erikson's stages does this child fit? Industry vs. Inferiority

What behaviors would you expect? Demonstrates competency to win approval from others

What did you observe? Initiative with the condition and involved in providing information for care

Cognitive Development:

Which stage does this child fit, using Piaget as a reference? Preoperational

What behaviors would you expect? Symbolic thinking

What did you observe? The patient used proper grammar when giving information/answering assessment questions

Vocalization/Vocabulary:

Development expected for a child's age and any concerns? No concerns noted

Any concerns regarding growth and development? No concerns noted

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis and listed in order of priority

<p>Nursing Diagnosis</p> <ul style="list-style-type: none"> • Include full nursing diagnosis with "related to" and "as evidenced by" components 	<p>Rational</p> <ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 	<p>Intervention (2 per dx)</p>	<p>Evaluation</p> <ul style="list-style-type: none"> • How did the patient/family respond to the nurse's actions? • Client response, the status of goals and outcomes, modifications to plan.
<p>1. Ineffective breathing pattern r/t allergic reaction AEB coughing and respiratory distress</p>	<p>Inadequate ventilation</p>	<p>1. auscultate breath sounds 2. assess respiratory rate, rhythm, and depth</p>	<p>The patient and family respond well to treatment, the patient goal is to maintain optimal breathing pattern with the absence of coughing and respiratory distress</p>
<p>2. Impaired gas exchange r/t allergic reaction AEB dyspnea and wheezing</p>	<p>Cannot maintain oxygen level on room air</p>	<p>1. monitor oxygen level (>94%) 2. auscultate breath sounds</p>	<p>The patient and family respond well to treatment, patient goal is to maintain optimal breathing pattern with the absence of dyspnea and wheezing</p>
<p>3. Decreased cardiac output r/t allergic reaction AEB tachycardia</p>	<p>Prolonged capillary refill</p>	<p>1. assess H.R. and B.P. 2. Assess ECG for dysrhythmias</p>	<p>The patient and family respond well to treatment, the patient goal is to maintain optimal cardiac Output having B.P. and H.R. in normal ranges</p>
<p>4. Deficient knowledge r/t</p>	<p>Deficiency of information about</p>	<p>1. assess knowledge of condition and</p>	<p>The patient and family respond well to treatment,</p>

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diagnosis AEB patient ate allergen product	allergic reaction	allergen exposure 2. explain the risk factors of anaphylaxis	patient goal is to avoid allergens
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Other References (APA):

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource: medical-surgical, pediatric, maternity, and psychiatric-mental health*. Elsevier.

Concept Map (20 Points):

Subjective Data

Aunt states patient “ate a cookie and then had difficulty breathing”. Aunt brought the patient to the ED at 1500, no relief measures were taken. Patient in distress and complains of difficulty breathing.

Nursing Diagnosis/Outcomes

Ineffective breathing pattern r/t allergic reaction AEB coughing and respiratory distress
Impaired gas exchange r/t allergic reaction AEB dyspnea and wheezing
Decreased cardiac output r/t allergic reaction AEB tachycardia
Deficient knowledge r/t diagnosis AEB patient ate allergen product

Outcomes: The patient will have respiratory relief without coughing, wheezing, and have >94% oxygen on room air. Patient will have a regular heart rate and rhythm. The patient and family will have knowledge about the peanut allergy and allergic reactions.

Objective Data

6-year old child arrived at ED with tachycardia, dyspnea, and mild stridor. Upon assessment, temperature was 37.1C, pulse of 156, respiratory rate of 25, 109/73 blood pressure, O2 at 90% NC or NR required for >94%, 0/10 pain with FACES scale. No labs were drawn. No cultures were completed. ECG performed with results of sinus tachycardia. Patient experiences wheezing and coughing.

6-year old male patient with history of allergies to perfumes, dyes, and peanuts was admitted with a diagnosis of anaphylaxis. Patient has difficulty breathing, tachycardia, wheezing, coughing, and increase respiratory effort with retractions. Patient

uncle.

Nursing Interventions

1. auscultate breath sounds
2. assess respiratory rate, rhythm, and depth
 1. monitor oxygen level (>94%)
2. auscultate breath sounds
 1. assess HR and BP
2. Assess ECG for dysrhythmias
 1. assess knowledge of condition and allergen exposure
2. explain risk factors of anaphylaxis