

CLINICAL DATE_8/30/2019

Patient's Age 16
Year's months

Weight (in kg) 70.7

BMI 23.02

Allergies/Sensitivities to medications, foods, contact, environmental, etc. Include reactions: No known allergies

Chief Complaint (Reason for admission): Neck pain/ Sore throat

Admit date: 8/29/2019

Other co-existing conditions: Subcutaneous emphysema at the neck base

History of Present Illness (What events led up to this child being admitted to the hospital, etc.):

16-year-old male referred to CFH ED from Christie Clinic for evaluation of sore throat and neck pain since last night. Denies fever but reported dry cough. CT showed no evidence of soft tissue abscess but did show evidence of pneumomediastinum extending to neck. NPO since midnight. No mediastinal fluid collection, lungs are clear.

Pertinent Events during this Admission and Hospitalization (IV starts, lab test, etc.): CBC/ BMP, Ct of chest

Past Medical & Surgical History (illnesses, hospitalizations, immunizations, birth history-any complications?) Patient does not have any significant surgical or medical history.

Child's diagnosis: Pneumomediastinum_ **Etiology of disease process** (what causes it): Free air or gas contained within the mediastinum, which originates from the alveolar space or the conducting airways.

Pathophysiology: (What is the pathophysiology of this disease and what goes on in the body as a result of this disease? Put in your own words & site reference) Pneumomediastinum is defined as free air or gas contained within the mediastinum, which almost invariably originates from the alveolar space or the conducting airways. Many distinguish spontaneous pneumomediastinum as a form of pneumomediastinum that is not associated with blunt force or penetrating chest trauma.

Reference:

Carolan, P. (2019, February 26). Pneumomediastinum. Retrieved September 2, 2019, from Medscape website:

<https://emedicine.medscape.com/article/1003409-overview>

Clinical Manifestations of the disease (Highlight those exhibited by your patient) – include lab values, tests, etc:

Dyspnea, cough, **dysphagia**, light headedness, dyspareunia

Vital Signs: (List your source for the Normal ranges) T 98.0 F __HR. 54__ (NL for age) __55-90__ RR. __18__

(NL for age) __17-18__ B/P __116/62__ (NL for age) 110-135/ 65/85 O2

sat __98%__ Room Air or Oxygen __Room Air__

Reference: Novak, C. (2018, July 10). Pediatric Vital Signs Reference Chart. Retrieved September 2, 2019, from

Peds Cases website: <https://www.pedscases.com/pediatric-vital-signs-reference-chart>

Intake/Output: (IV, PO, Out & Deficits) Intake: IV- 527.1, Total = 527.1. Output: Urine- 600, No deficits, Total = 600

Clinical Day Evaluation Data – Head to toe physical assessment (Do not use WNL or WDL): _____

General appearance: Alert and Orient, clean appearance

Head: Air pockets on the right side of neck above the clavicle bone

Ears: Pink auricle, pearly grey TM, dry skin, slight cerumen

Eyes: PERRLA

Thyroid: Was not palpable when doing the neck assessment

Chest: lung sounds were clear, nice deep breathing, chest rose and fell with each breath

CV: heart sounds were clear, no murmur noted

Abdomen: no pain when palpating or assessing the abdomen

GU: Bowel sounds were active, defecated about 3x a day

Musculoskeletal: patient was able to move all extremities

Extremities: had 2+ pulses in all extremities, reflexes were all in tact

Skin: white, dry, clean appearance, had no lesions or bruises

Other: _____

Pain History & assessment: Type, location, intensity & timing, precipitating factors, relief measures/interventions, rating scale

used, physiological and/or behavioral signs, evaluation of pain status after medication is given: History assessment had pain

swallowing on right side with sore throat, was given Toradol and Tylenol and had a D5 drip continuous. Assessment this morning, no

pain when swallowing, no pain meds were given, still on D5 IV drip.

Lab Tests: No labs were done on the day of clinical

TEST	NORMAL (specific for age)	Correlation to current health status & comment on trending (comment only on abnormal lab results)		
		Prior	Clinical Day	
RBCs	4.03-5.29	5.31		
Hgb	11.0-14.5	15.3		
Hct	33.9-43.5	44.8		
MCV	76.7-89.2	84.4		
MCH	25.2-30.2	28.8		
MCHC	31.8-34.8	34.2		
WBCs	3.84-9.84	8.54		
Neutrophils	1.54-7.04	4.98		
Eosinophils	.04-.38	.10		
Basophils	.01-.05	.02		
Monocytes	.18-.78	.88		

Lymphocytes	.97-3.26	2.55		
Platelets	175-332	325		
TEST	NORMAL (specific for age)	Prior	Clinical D ay	Correlation to current health status & comment on trending
Glucose	60-99	84		
Na ⁺	135-145	138		
Cl ⁻	98-107	104		
K ⁺	3.5-5.1	3.8		
Ca ⁺⁺	8.5-10.1	8.9		
Phosphorus				Patient has had none of these labs drawn
Albumin				Patient has had none of these labs drawn
Total Protein				Patient has had none of these labs drawn
BUN	7-18	13		
Creatinine	.70-1.30	.90		
TEST	NORMAL (specific for age)	Prior	Clinical D ay	Correlation to current health status & comment on trending
Patient has had none of these labs drawn				
Liver Function Tests				
Urinalysis				
Urine specific gravity				
Urine pH				
Creatinine clearance				
Other Labs:				

Diagnostic Studies:

TEST & RESULTS	Correlation to current health status (if abnormal)
Chest x-ray: Mandible 8/30	Test was clear
CT Scan/MRI: Soft tissue neck	Found air extending into the deep soft tissue of neck due to pneumomediastinum
Biopsy/Scope:	None while admitted
Cultures:	None while admitted

Other:	
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List of active orders on this patient:

ORDER	COMMENTS/RESULTS/COMPLETION
Activity: As tolerated, no restrictions	In bed, got up as needed
Diet/Nutrition:	NPO since midnight
Frequent Assessments:	Q4 hours
Labs/Diagnostic Studies:	CT, XRay of the chest
Treatments:	Tylenol and Toradol

New Orders for Clinical Day

ORDER	COMMENTS/RESULTS/COMPLETION
Esophagus Barium Swallow test	Was not done while I was in clinicals

Teaching & Learning: Identified teaching need (be specific): Pneumomediastinum prevention

Summarize your teaching (prioritization in care, methods used, materials used, time to provide, etc.): I talked to the patient about the possibility of working out more to gain muscle. The more muscle he will gain will have the possibility to prevent him from throwing another spontaneous pneumomediastinum. Also talked to him about signs and symptoms of a pneumomediastinum so that way if he experiences any of those symptoms, he can go into the emergency room as soon as possible. The patient was paying full attention and seemed like he genuinely cared to learn about it.

Evaluation of your teaching (establish expected outcomes and describe if met; effectiveness of materials/approach, what next?): The effectiveness of this teaching was met. He understood why the muscle gain was important and how it could prevent any more spontaneous pneumomediastinum. He said he will attempt to go 3x a week.

Developmental Assessment: 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 & Developmental Milestones

1. Change in body size and proportions
2. Sexual characteristics develop
3. Should of hit puberty

Age Appropriate Diversional Activities

1. Part time jobs
2. Sports
3. After school activities

Psychosocial Development: Which of Erikson's stages does this child fit? Middle stage

What behaviors would you expect? Continues to adjust to changed body image, able to understand implications of behavior and decisions, interested in attracting opposite gender, takes more responsibility for own behavior

What did you observe? Understood what was wrong with him and could show the nurses where the air was in his neck, would occasionally ignore his moms' question in some way tune her out.

Cognitive Development: Which stage does this child fit, using Piaget as a reference? Middle stage

What behaviors would you expect? Thinks he or she is invincible, likes making independent decisions, increased ability to think abstractly or in more idealistic terms

What did you observe? Able to explain his symptoms and when they began, was independent on his decision making for the most part

Vocalization/vocabulary: Development expected for child's age and any concerns? Should be in puberty by this age, able to understand change and be independent. Had no concerns about his development

Any concerns regarding growth and development? No

Potential Complications that can occur because of this disease/disorder:

Potential Complication	Signs/Symptoms	Preventative Nursing Actions
1. Lungs can collapse	Shortness of breath, nasal flaring, sharp chest or shoulder pain that is worsened by deep breathing or cough.	Monitor lung sounds frequently, put them on oxygen, and use an incentive spirometer
2. Air can accumulate around sac of heart	Palpitations, shortness of breath, feeling of chest fullness, orthopnea, anxiety, confusion, cough	Monitor heart sounds frequently

Nursing Care Plan

Nursing Diagnosis <u>Prioritize-most important to least</u>	Outcomes (Patient/Family will: and give time line) (MUST BE MEASURABLE)	Nursing Interventions <u>With rationale</u> <u>(At least 2 nursing interventions per outcome)</u>	Evaluation of <u>EACH</u> outcome
<p>Ineffective breathing pattern</p> <p>Related to: decreased lung expansion</p> <p>AEB (as evidenced by): changes in depth/equality of respirations</p>	<ol style="list-style-type: none"> 1. Be able to be within normal range of respirations twice before being discharged 2. Getting proper gas exchange to get rid of extra air in spaces before thoracic surgery team sees him 	<ol style="list-style-type: none"> 1. Use an incentive spirometer to help his breathing and lung capacity 2. Try to get him out of bed and up and moving, maybe even taking some laps around the halls 1. Using oxygen to get proper has exchange throughout the body 2. Use and incentive spirometer 	<p>Outcomes Met/ Partially met/ Not met (with Explanation)</p> <ol style="list-style-type: none"> 1. Outcomes met, got within normal range 4 times 2. Outcomes partially met, he is doing the incentive spirometer but the extra air bubbles are still in the tissue <p>What next? Wait for thoracic surgery team to come see him</p>

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Nursing Care Plan

Nursing Diagnosis <u>Prioritize-most important to least</u>	Outcomes (Patient/Family will: and give time line) (MUST BE MEASURABLE)	Nursing Interventions <u>With rationale</u> <u>(At least 2 nursing interventions per outcome)</u>	Evaluation of <u>EACH</u> outcome
<p>Knowledge deficient</p> <p>Related to: Lack of exposure to information</p> <p>AEB (as evidenced by): expression of concern</p>	<ol style="list-style-type: none"> 1. Verbalize understanding for cause of problem by discharge 2. identify signs and symptoms requiring medical follow up before he is discharged 	<ol style="list-style-type: none"> 1. sit down with the patient and talk to him about his condition in a way that he will understand 2. Have the patient then turn around and teach you about his condition to make sure that he fully understood it 1. Review the signs and symptoms with the patient of what will occur if a pneumomediastinum occurs again 2. Educate him on what to do if one happens again later on in life 	<p>Outcomes Met/ Partially met/ Not met (with explanation)</p> <ol style="list-style-type: none"> 1. Outcomes met, patient could teach me about his condition 2. Outcomes met, patient was able to tell me what the signs and symptoms were and what to do if they happen again <p>What next? Let the nurse know that he is now educated about his condition</p>

N308 Medication Form

Patient Initials: ___WS_____

Patient Age: ___16_____

Patient Weight (in kg): ___70.7_____

Scheduled Medications				
Medication Trade & Generic Names, Pharmaceutical Class Action of the medication (how does the medication work in the body <u>in your own words</u>)	Dose, route, & frequency ordered for this patient	Concentration Available Why is this pt. taking this?	Calculate the safe dose ranges for this child. This is done by multiplying the safe dose range by the child's weight. https://www.epocrates.com/lite/RegHonorsRegistrationProcess.do What is the maximim dose that can be given in a 24 period? (Show Calculations)	<u>Nursing Considerations</u> (at least 3 & must be appropriate for this patient, & include any labs that need to be done to monitor pt. while taking this medication) <u>Contraindications</u> <u>Common side effects</u>
Generic: acetaminophen Trade: Tylenol Pharmacological class: analgesic, non-opioid Action: helps with pain and or fever	Oral route, 500mg every 4 hours	500 mg tablet Patient is taking for pain and temp of 100.4F	4 grams per day (Mosby's 2016 drug reference guide)	Side effects: nausea, vomiting, insomnia Contraindications: hypersensitivity to acetaminophen, severe hepatic impairment, severe active liver disease Considerations: take no more than 4 grams in a 24-hour day, should have updated vaccines before taking this medication, if contain propylene glycol it can cause seizures
D5-0.9% NaCl Pharmacological class: Intravenous nutritional therapy Action: source of calories and water for	IV, 75 ml/hr, continuous	75 ml Source of calories and nutrition since he was NPO		Side effect: hyperglycemia

dehydration				
<p>Generic: Fentanyl Trade: Sublimaze Pharmalogicalclass: analgesic, non-opioid Action: pain management</p>	<p>IV push, 15 mcg, every 2 hours, PRN</p>	<p>50 mcg/ml Taking for pain</p>	<p>50-100 mcg daily (Mosby's 2016 drug reference guide)</p>	<p>Side effect: dry mouth, nausea, vomiting Contraindications: hypersensitivity to fentanyl, severe bronchial asthma, acute respiratory depression Considerations: may cause CNS depression, can cause hypotension, can impair renal function</p>
<p>Medication Trade & Generic Names, Pharmaceutical Class Action of the medication (how does the medication work in the body <u>in your own words</u>)</p>	<p>Dose, route, & frequency ordered for this patient</p>	<p>Concentration Available Why is this pt. taking this?</p>	<p>Calculate the safe dose ranges by what is given as a safe dose times the child's weight. Do this for a 24 hour period. (Show Calculations) Is this dose safe for this pt.?</p>	<p><u>Nursing Considerations</u> (at least 3 & must be appropriate for this patient, & include any labs that need to done to monitor pt. while taking this medication) <u>Contraindications</u> <u>Common side effects</u></p>
<p>Generic: Ketorolac Trade: Toradol Pharmalogical class: analgesic, non-opioid Action: pain management</p>	<p>IV push, 30 mg, every 6 hours, PRN</p>	<p>30 mg/ml Patient is taking for pain</p>	<p>63 mg daily (Mosby's 2016 drug reference guide)</p>	<p>Side effect: nausea, abdominal pain, heartburn Contraindications: hypersensitivity to ketorolac or any other NSAIDs, recent history of GI bleeding, advanced renal disease Considerations: can cause dizziness, severe hepatic reactions(Jaundice, hepatic failure), withhold for 4-6 hours prior to having surgery</p>

N308 CARE PLAN GRADING RUBRIC FOR HOSPITAL

Name: _____

Date _____

Grade _____

Section	Definition	Possible Points	Final Points
Age/Weight/BMI	Age is written in years & months. Weight is calculated in kilograms. BMI is written correctly	1	
Allergies & reaction to each	Allergies/sensitivities to food, contact, environmental. Include reactions	2	
Chief Complaint/Medical Diagnosis/Co-existing Conditions	Chief complaint, reason for admission, current primary diagnosis. Are there any other health/medical co-morbidities?	3	
History of Present Illness	Describe what has happened to the child that caused this child to be admitted	5	
Pertinent Events during this Admission	i.e., Surgery, instability during hospitalization, diagnostic tests, IV starts, procedures	1	
Past Medical & Surgical History	Past surgeries, previous health issues and diagnoses	2	
Pathophysiology	Explain in your own words the pathophysiology of the current, primary diagnosis. If a resource is used, please site the reference.	5	
Vital Signs and I & O	All vital signs and document normal vital signs for child's age. <u>All</u> I & O is documented with deficits	2	
Clinical Day Evaluation	Head to toe physical assessment with comments (DO NOT use WNL/WDL) & emphasis on systems affected by chief complaint/medical diagnosis.	8	
Pain Assessment	Pain rating and pain scale used	2	
Lab Tests	Labs day of clinical and prior tests (trend them if numerous test). Give rationale for abnormal lab tests.	2	
Diagnostic Studies	X-rays, biopsies, EKG, CT scans, MRI, scopes, cultures, etc.	2	
Patient Orders Clinical Day	Activity, diet, assessments, labs/studies, treatments, code status, etc.	1	
Clinical Day new orders	Activity, diet, assessments, labs/studies, treatments, code status, etc.	1	
Teaching and learning	Identify teaching need. Summarize teaching. Evaluate teaching.	3	
Developmental Assessment	3 Age appropriate growth and developmental milestones that should be expected for the child's age. 3 Age appropriate Divirsonal/Distracton activities appropriate for child's age. Erikson's psychosocial development stage and behaviors expected for child's age. Piaget's cognitive development stage and behaviors expected for child's age. Vocalization/vocabulary development expected for child's age and is the child's language appropriate for that age. Any concerns regarding growth and development for the child.	6	
Potential Medical Complications	Complications that can occur because of primary medical diagnosis/disease/condition. Signs & Symptoms of complication. Preventative nursing actions.	6	

Nursing Diagnosis # 1 Related to or AEB	Nursing diagnosis is pertinent to patient condition/diagnosis. Reflects and supports current primary medical diagnosis R/T the pathophysiology for the current primary diagnosis/condition (not medical diagnosis). AEB: signs and symptoms that support the nursing diagnosis	4	
Expected Outcomes	Patient will/Family will.... and <u>must have a desired outcome timeline</u> . (Must be measurable, specific, & objective) (Ex: patient will ambulate around the nurse's station once during clinical or patient will verbalize 3 signs and symptoms of infection by the end of clinical day).	4	
Nursing Interventions	What nursing interventions will you do to support meeting the patient outcomes and give rationale for each intervention of why this intervention is important? (Need at least 2 interventions per outcome)	8	
Evaluations & What's Next	Goal met/partially met/not met, why or why not, what's next? (Explain your evaluation of outcomes met, partially met, or not met (i.e., patient/family was not able to verbalize 3 signs and symptoms of infection) What's next? (What is/are the next intervention/s for the patient/family to help them meet the intended outcome)?	3	
Nursing Diagnosis #2 Related To and AEB (as evidenced by)	Nursing diagnosis is pertinent to patient condition/diagnosis. Reflects and supports current primary medical diagnosis, MUST prioritize the most important nursing diagnosis to the least important R/T the pathophysiology for the current primary diagnosis/condition (not medical diagnosis). AEB: signs and symptoms that support the nursing diagnosis	4	
Expected Outcomes	Patient will/Family will.... and <u>must have a desired outcome timeline</u> . (Must be measurable, specific, & objective) (Ex: patient will ambulate around the nurse's station once during clinical or patient will verbalize 3 signs and symptoms of infection by the end of clinical day).	4	
Nursing Interventions	What nursing interventions will you do to support meeting the patient outcomes and give rationale for each intervention of why this intervention is important? (Need at least 2 interventions & rationale per outcome)	8	
Evaluations & What's Next	Goal met/partially met/not met, why or why not, what's next? (Explain your evaluation of outcomes met, partially met, or not met for each outcome (i.e., patient/family was not able to verbalize 3 signs and symptoms of infection) What's next? (What is/are the next intervention/s for the patient/family to help them meet the intended outcome)?	3	
Medications			
Scheduled & PRN	Trade/Generic name, Pharmacologic Class & Action of the medication. Indications for this patient.	3	
	Dose, Route, Frequency ordered for this patient	1	
	Concentration available and why is the child taking this medication	1	
	Calculate dose ordered times child's weight (give parameters for this medication if needed) and is this dose that's ordered safe for the child?	2	
	Three nursing considerations/implications for each medication specific to this patient and give Contraindications and Common Side Effects	3	
	Total Points	100	