N433 Care Plan #1

Lakeview College of Nursing

Nikki Brown

Demographics (3 points)

Date of Admission 06/23/21	**Patient Initials** J (Only provided first name due to confidentiality)	**Age (in years & months)** 14 years old	**Gender** Male
Code Status Full	**Weight (in kg)** 182.8kg	**BMI** 56.21 kg/m^2	**Allergies/Sensitivities (include reactions)** NKA

Medical History (5 Points)

Past Medical History: Unable to obtain due to patient being sedated, no family in room, nothing in chart.

Illnesses: none

Hospitalizations: No other hospitalizations listed other than today.

Past Surgical History: No past surgical history**.**

Immunizations: Unable to obtain due to patient being sedated, no family in room, nothing in chart.

Birth History: Unable to obtain due to patient being sedated, no family in room, nothing in chart.

Complications (if any): N/A

Assistive Devices: None

Living Situation: Unable to obtain due to patient being sedated, no family in room, nothing in chart.

Admission Assessment

Chief Complaint (2 points): Multiple gunshot wounds

Other Co-Existing Conditions (if any): none

Pertinent Events during this admission/hospitalization (1 points):

During his stay he was sedated and intubated. He had a foley catheter placed, wound vacuum, external fixation device on left tibia, chest tube, NG tube, 3 IVs, and an arterial line. All 8 of the bullet wounds have pressure dressings on them. Pulse checks were done every hour on the left leg with the external fixation device. Oral care was provided twice a day. Medications were given. Patient was turned every two hours.

History of present Illness (10 points):.

Patient initially went to a different facility to treat and stabilize him before he was shipped out to Carle hospital pediatric intensive care unit. Patient is unable to verbalize pain due to sedation and intubation. The rFLACC pain tool was used and no pain was indicated based off behavior and facial cues. The mother states that the patient was walking home from the grocery store when a group of boys were waiting on him to injure him due to association with their other target. Mother was not at bedside for further details.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Assault with gunshot wounds; multiple gunshot wounds.

Secondary Diagnosis (if applicable): Open left tibia shaft fracture type 1 commuted. Trauma. Right kidney laceration with perinephric hematoma. Open fracture of sacrum left pedicle, transverse process, and pneumothorax.

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

A pneumothorax is when gas gets caught in the pleural space between the lungs and the chest wall. An acute increase in pressure goes above the pulmonary interstitial pressure and can lead to alveolar rupture and pleural air leakage (Costumbrado, 2020). If air goes into the pleural cavity, the lung can collapse and make it hard to breathe (Jackson, 2021).

Upon assessing pneumothorax, the patient may be experiencing tachycardia, dyspnea, sharp/stabbing chest pain, shortness of breath, fatigue, cyanosis, cough, and tachypnea (Cook, 2020). Decreased or absent breath sounds may indicate that the lung is not inflated in the area being auscultated (Cook, 2020). The patient will typically have an arterial blood gas ordered (ABG), and the results can show respiratory alkalosis (Cook, 2020). This patient did have an ABG preformed, and the results did show that he was in respiratory alkalosis. The symptoms that go along with a pneumothorax can be life-threatening due to the severe onset of chest pain and difficulty breathing (Cook, 2020). The symptoms can depend on how much the lung has collapsed. The complications that can accompany a collapsed lung are re-expansion pulmonary edema when extra fluid is in the lungs, damage or infection caused by the treatment, inability to breathe, heart failure, and death. Nurses need to monitor for signs of heart or breathing problems to prevent any additional complications that can result from a pneumothorax (Cleveland Clinic medical professional, 2021).

A chest x-ray must be obtained to confirm a diagnosis. On the x-ray, air can be seen outside the normal lung airway indicating a pneumothorax (Cook, 2020). Ultrasounds can also assist in providing a diagnosis (Cook, 2020). A pneumothorax is a medical emergency and needs to be rapidly diagnosed to relieve pressure from the lung for it to expand (Cook, 2020). A chest x-ray was done for this patient to confirm his diagnosis of a pneumothorax.

Treatment of pneumothorax depends on its severity. Observation can be done until the air is naturally reabsorbed by the body, simple aspiration, chest tube placement, Heimlich valve insertion, and surgery using video-assisted thoracoscopy (Cook, 2021). This 14-year-old patient's treatment was done with a chest tube. The chest tube is to be monitored frequently with an I&O order. If the patient remains stable and eventually gets to discharge home, he will need to do minimal physical activity, breathing exercises, incentive spirometry, and noninvasive ventilation (Cook, 2020). Sputum removal can be done by postural drainage, breathing exercises, percussion, shaking, and vibrations (Cook, 2020).

Pathophysiology References (2) (APA):

Costumbrado, J. (2020, July 26). *Spontaneous Pneumothorax*. StatPearls [Internet]. https://www.ncbi.nlm.nih.gov/books/NBK459302/.

Jackson, K. (2021). *Pneumothorax*. Physiopedia. https://www.physio-pedia.com/Pneumothorax.

Cook, E. (2020, April 10). *Symptoms, Diagnosis and Treating Pneumothorax*. American Lung Association. https://www.lung.org/lung-health-diseases/lung-disease-lookup/pneumothorax/symptoms-diagnosis-treatment.

Cleveland Clinic medical professional. (2021, May 11). *Collapsed Lung (Pneumothorax): Symptoms, Causes & Treatment*. Cleveland Clinic. https://my.clevelandclinic.org/health/diseases/15304-collapsed-lung-pneumothorax.

Active Orders (2 points)

Order(s)	Comments/Results/Completion
Activity:	Completely immobile due to sedation.
Diet/Nutrition:	NPO

Frequent Assessments:	Pressure dressing assessment every hour. Pulse checks on left lower limb every hour.
Labs/Diagnostic Tests:	Hemoglobin, hematocrit, and urine analysis are ordered to be collected today.
Treatments:	Consult with orthopedic surgeon. Respiratory for vent protocol. PT/OT Wound vacuum. Oxygen therapy.
Other:	NG tube and foley catheter.
New Order(s) for Clinical Day	
Order(s)	**Comments/Results/Completion**
Hemoglobin and hematocrit	Ordered at 0810. Results were not back in time.
N/A	**N/A**
N/A	**N/A**
N/A	N/A

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	3.50-5.70	3.89	3.36	This can happen from possible

				hemorrhage or nutritional deficiency due to the patient being NPO (Martin, 2021).
Hgb	11-18	10.2	8.8	This can happen from possible hemorrhage or nutritional deficiency due to the patient being NPO (Martin, 2021).
Hct	34-51	31.2	27.4	This can happen from possible hemorrhage or nutritional deficiency due to the patient being NPO (Martin, 2021).
Platelets	140-400	342	277	Within normal limits.
WBC	4-11	12.25	12.60	Can be due to inflammation throughout body, trauma, tissue necrosis, and infection (Martin, 2021).
Neutrophils	1.60-7.70	10.34	9.83	This can happen from possible hemorrhage or nutritional deficiency due to the patient being NPO (Martin, 2021).
Lymphocytes	1-4.90	0.83	1.23	Can be due to inflammation or infection (Martin, 2021).
Monocytes	0-1.10	1.00	1.40	Can be due to inflammation or infection (Martin, 2021).
Eosinophils	0-0.50	0.00	0.00	Within normal limits.
Basophils	0-0.20	0.01	0.01	Within normal limits.
Bands	0.5	N/A	N/A	Not ordered

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-	135-145	142	138	Within normal limits.
K+	3.5-5	3.8	4.7	Within normal limits.
Cl-	95-105	110	107	Can be caused by dehydration, hyperventilation, and respiratory alkalosis (Martin, 2021).
Glucose	70-110	121	139	Chart did not have any past medical

				information, it is unknown if he is diabetic, but he does have insulin ordered for treatment. This can also be caused by diuretic and corticosteroid therapy, and acute stress responses (Martin, 2021).
BUN	7-18	10	15	Within normal limits.
Creatinine	0.7-1.3	1.09	1.30	Within normal limits.
Albumin	3.4-5	3.6	2.4	Can be caused by malnutrition or loss of protein (Martin, 2021).
Total Protein	6.4-8.2	7.1	5.6	Can be due to bleeding and severe malnutrition (Martin, 2021).
Calcium	8.5-10.1	8.7	8.3	Can be due to malabsorption or vitamin D deficiency (Martin, 2021).
Bilirubin	0.2-1.0	0.3	0.2	Within normal limits.
Alk Phos	45-117	266	133	Can be caused by hypocalcemia, increased IV intake of phosphorus, and hemolytic anemia (Martin, 2021).
AST	15-37	28	64	Can be increased due to this patients' multiple traumas (Martin, 2021).
ALT	12-78	31	65	Within normal limits.
Amylase	19-76	N/A	N/A	Not ordered
Lipase	7-59	N/A	N/A	Not ordered

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	3-15	N/A	N/A	Not ordered
CRP	0-0.29	N/A	N/A	Not ordered

Hgb A1c	<7.5	N/A	N/A	Not ordered
TSH	0.45-4.5	N/A	N/A	Not ordered

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	Clear/yellow	N/A	N/A	Not ordered
pH	4.5-8	N/A	N/A	Not ordered
Specific Gravity	1.005-1.030	N/A	N/A	Not ordered
Glucose	Negative	N/A	N/A	Not ordered
Protein	Negative	N/A	N/A	Not ordered
Ketones	Negative	N/A	N/A	Not ordered
WBC	<5	N/A	N/A	Not ordered
RBC	<5	N/A	N/A	Not ordered
Leukoesterase	Negative	N/A	N/A	Not ordered

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	Negative	N/A	N/A	Not ordered
Blood Culture	Negative	N/A	N/A	Not ordered
Sputum Culture	Negative	N/A	Rare squamous epithelial cells gram positive cocci.	Bacterial infection in respiratory tract (Martin, 2021). It could also be due to contamination.

Stool Culture	Negative	N/A	N/A	Not ordered
Respiratory ID Panel	Negative	N/A	N/A	Not ordered

Lab Correlations Reference (1) (APA):

Andropoulos, D. B. (2011). Appendix B: Pediatric Normal Laboratory Values. *Gregory's Pediatric Anesthesia*, 1300–1314. https://doi.org/10.1002/9781444345186.app2

Martin, P. (2021, June 11). *Nursing Guides, Care Plans, NCLEX Practice Questions*. Nurseslabs. https://nurseslabs.com/.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Chest Xray

Diagnostic Test Correlation (5 points):

The chest x-ray was done to diagnose the pneumothorax (Costumbrado, 2020). No other diagnostic test is in the chart nor were any done while student was on the floor.

Diagnostic Test Reference (1) (APA):

Costumbrado, J. (2020, July 26). *Spontaneous Pneumothorax*. StatPearls [Internet]. https://www.ncbi.nlm.nih.gov/books/NBK459302/.

Current Medications (8 points)
****Complete ***ALL*** of your patient's medications****

Brand/ Generic	Propofol (Diprivan)	Enoxaparin (Lovenox)	Famotidine (Pepsid)	Methocarbamol (Robaxin)	Miralax (Polyethylene glycol)
Dose	10mg/ml	40mg	20mg	750mg	17g

Frequency	Continuous	BID	Q12h	Q6h	BID
Route	IV	SubQ	IV push	NG Tube	NG Tube
Classification	Sedative-hipnotic	Anticoagulant	Antiulcer agent	Skeletal muscle relaxant	Laxative
Mechanism of Action	Decreases cerebral blood flow, cerebral metabolic oxygen consumption, and intracranial pressure and increases cerebrovascular resistance, which may play a role in propofol's hypnotic events.	Potentiates the action of antithrombin III, a coagulation inhibitor. By binding with antithrombin III, enoxaparin rapidly binds with and activates clotting factors.	This medication prevents hydrochloric acid formation by preventing histamine from binding with H2 receptors. By doing so, the drug helps prevent peptic ulcers from forming and helps heal existing ones.	May depress CNS, which leads to sedation and reduce skeletal muscle spasms. Methocarbamol also alters perception of pain.	Osmotic agent which binds water and causes water to be retained within the stool.
Reason Client Taking	To provide sedation for critically ill in intensive care.	To prevent deep vein thrombosis and prophylactic during hospitalization.	To prevent or treat GI bleeding for hospitalized patient who cannot take oral drugs	Sedation	To treat and prevent constipation.
Concentration Available	Rate of 200 mcg/kg/min to 300 mcg/kg/min	Prefilled syringe 40mg/ 0.4ml	40 mg tablets	16.5-29.8 mcg/ml	17g in 4-8oz liquid
Safe Dose Range Calculation	36.64-54.96 mg/ml	1 mg/kg q12h	20-40 mg	500-750mg	0.2-1.8g/ kg/day
Maximum 24-hour Dose	417.5 mg/ml	80mg	40mg	750mg	473.2 ml
Contraindications (2)	Hypersensitivity to	Active major bleeding;	Hypersensitivity to	Hypersensitivity to	Acute abdomen,

	propofol or its components, to eggs or egg products, or to soybeans or soy products.	hypersensitivity to benzyl alcohol, heparin, enoxaparin, pork products or their components.	famotidine, other H2 – receptor antagonists, or their components.	methocarbamol or its components, renal disease.	diarrhea, GI bleeding, GI obstruction, GI perforation and vomiting.
Side Effects/Adverse Reactions (2)	Bradycardia, hypotension, apnea, and anaphylaxis	CVA, atrial fibrillation, CHF, thrombosis, hematemesis, melena, hemorrhage, thrombocytopenia, pulmonary edema or embolism, and anaphylaxis.	Seizures, arrhythmias, AV block, prolonged QT interval, hepatitis, aplastic anemia, rhabdomyolysis, bronchospasm, pneumonia, anaphylaxis, angioedema.	Seizures (IV.), bradycardia, hypotension, anaphylaxis, angioedema.	Abdominal pain, urticarial, puritis, nausea, and anaphylaxis.
Nursing Considerations (3)	Shake container well before using and administer promptly after opening. Dosage must be tapered before stopping therapy. Stopping abruptly will cause rapid awakening, anxiety, agitation and resistance to mechanical ventilation.	Don’t give drug by IM injection. Watch closely for bleeding. Watch stool for occult blood. Keep protamine sulfate nearby in case of accidental overdose. Check serum potassium levels.	Give IV injection at least over 2 minutes. Shake oral suspension vigorously for 5-10 seconds before administration. For infusion dilute in 100ml of D5W and infuse over 15-30 minutes.	Crush tablets and mix with water or saline solution for administration by NG tube. Don’t give by subcutaneous route. Keep antihistamines, corticosteroids, and epinephrine available in case of anaphylactic reaction.	Assess client for abdominal distention. Presence of bowel sounds and usual pattern of bowel function. Assess color, consistency, and amount of stool produced

	Monitor patient for propofol infusion syndrome.				
Client Teaching needs (2)	Urge patient and family to voice concerns and ask questions before administration. Reassure family that patient will be monitored closely during administration and the vital signs will be supported as needed.	Teach family that patient my bruise and bleed more easily and may take longer than usual to stop bleeding.	Advise family to notify prescriber if they think patient is in pain or has black stools. Teach family, patient cannot take this medication with other acid reducing products.	Inform family member drug may turn urine black, brown, or green. Inform family the patient cannot do activities due to CNS effects.	Inform family that 2-4 days may be required to produce bowel movement. Prolonged frequent, or excessive use may result in electrolyte imbalance and dependence.

Medication Reference (APA):

Loebl, S. (2020). *2020 Nurse's drug handbook*. Jones & Bartlett Learning.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Patient is not alert or oriented. Patient is intubated and sedated but responds to verbal stimuli with opening eyes or moving hands. No distress. Overall appearance is clean, well-groomed, free of pain.
INTEGUMENTARY (2 points): **Skin color:** **Character:**	Patient skin color is normal for his race. Skin is dry in all areas of the body except for chest and face. A fan was put on him because he tried to

Temperature: **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☒ N ☐** **Type:** NG, chest, foley, wound vac **IV Assessment (If applicable to child):** **Size of IV:** **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:** **IV Fluid Rate or Saline Lock:**	take of gown indicating that he was hot. Temperature was at 100.4 which is a low fever. Skin turgor was normal. No rashes. Skin did have bruises and wounds throughout the body due to the trauma. Braden score is 9 therefore he is at severe risk for pressure wounds. He has a NG tube, chest tube, foley catheter, and a wounds vacuum. -Left radial arterial line 18-gauge IV, patency is good with a continued mean arterial pressure. Placed on 6/23/21. No signs of erythema or drainage. Dressing is intact. -Peripheral right antecubital 18-gauge patency is good flushes without difficulty. Placed on 6/23/21. No signs of erythema or drainage. Dressing is intact. Has continuous propofol running. -Left antecubital 16-gauge, patency is good flushes without difficulty. Placed on 6/23/21. No signs of erythema or drainage. Dressing is intact. Has continuous LR.
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:** **Thyroid:**	Head is normocephalic with symmetrical facial features. The neck and trachea are midline with no deviations or abnormalities. His hair is black with even proportioning. PERRLA is noted with normal EOM. No visual impairment. There is no abnormal drainage or erythema noted from the nose. Turbinate's are equal bilaterally with no deviated septum. Teeth are intact and white in color. Mucosa of the mouth is pink and moist. No enlarged or displaced thyroid is noted.
CARDIOVASCULAR (2 points): **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	S1 and S2 heart sounds are noted. No adventitious sounds are noted. Patient is tachycardic periodically and has a normal rhythm. Pedal pulse on left lower extremity is to be checked every hour due to external fixation device. Both pedal pulses were palpated. Capillary refill is within 2 seconds in all extremities. No evidence of JVD or edema noted in extremities.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Diminished breath sounds in all lobes bilaterally. No accessory muscle use is noted. No adventitious breath sounds are noted.

GASTROINTESTINAL (2 points): **Diet at home:** **Current diet:** **Height (in cm):** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☒ N ☐** **Size:** 12 french **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	Normally consumes a normal diet at home, is NPO at hospital. He has active bowel sounds in all four quadrants. Last BM is unknown, could not ask the patient and it was not in the chart. No palpation was done due to the wound vac on the abdomen as well as the two pressure dressings from the gunshot wounds. Patient had an NG tube size 12 french.
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☒ N ☐** **Type:** **Size:**	Color of urine was clear and orange, He had an output of 600ml of urine. No pain with urination indicated. No dialysis. Genitals appear normal. Catheter was placed, size 12 french.
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☐ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib)** **Needs assistance with equipment** **Needs support to stand and walk**	Patient is not alert or oriented, cannot speak, no motor deficits noted, can follow the command of squeezing my hand. Sensation is intact bilaterally. Patient is intubated and sedated therefore he needs assistance with all ADLs. Fall risk is 70 and anything above 51 is extreme fall risk. Patient cannot get up, completely immobile due to sedation.
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -**	Can somewhat move extremities, no neurological abnormalities related to motion or vision. He is not alert or oriented, cannot talk due to intubation. No sensory abnormalities noted. LOC

Legs ☐ Arms ☐ Both ☐ **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	is sedated.
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):**	.Unknown coping methods, social needs, personal/family data. Mother was not at bedside and patient is sedated. No information in chart.

Vital Signs, 1 set (2.5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0600	103	99/50	23	100.4 (Axillary)	97 (Mechanical Ventilator)
1030	111	100/51	24	100.4 (Axillary)	97 (Mechanical Ventilator)

Vital Sign Trends:

Pulse rate went from 103 up to 111.

Blood pressure was at 99/50 and went up to 100/51.

Respiratory rate went from 23 up to 24.

The patient temperature stayed the same.

Oxygen saturation stayed the same on the ventilator.

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

Pulse Rate	103-111 bpm
Blood Pressure	99/50-100/51

Respiratory Rate	23-24
Temperature	100.4-100.4
Oxygen Saturation	97-97%

Normal Vital Sign Range Reference (APA):

Holman, H.C., Williams, D., Sommer, S., Johnson, J., Wheless, L., Wilford, K., & McMichael, M. G. (2019). *RN nursing care of children review module* (11th ed.). Assessment Technologies Institute, LLC.

Pain Assessment, 2 sets (2 points)

Time	**Scale**	**Location**	**Severity**	**Characteristics**	**Interventions**
0600	rflacc	N/A	No pain	N/A	N/A
Evaluation of pain status *after* intervention	rflacc reassessed	N/A	No pain	N/A	N/A
Precipitating factors: Patient showed no signs of pain. **Physiological/behavioral signs:** N/A					

Intake and Output (1 points)

Intake (in mL)	**Output (in mL)**
580	720ml NG and catheter

Developmental Assessment (6 points)

Be sure to highlight the achievements of any milestone if noted in y our 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. May need more sleep. Fall asleep later.
2. Show more independence.
3. Care more about looks.

Age-Appropriate Diversional Activities

1. Video games
2. Hanging with friends
3. TV

Psychosocial Development:

Which of Erikson's stages does this child fit?

MS is in the middle part of the identity vs. role confusion stage (Ricci et al., 2017).

What behaviors would you expect?

Can expect to see mood changes, self-conscious feelings about body image, a need for acceptance by peer groups, interest in the opposite sex, conflict with parents or authoritative figures (Ricci et al., 2017).

What did you observe?

This patient could not express himself due to intubation. From the story his mother told it sounds like he and his cousin are close friends.

Cognitive Development:

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

According to Piaget this child fits into the formal operational stage which starts at 11 years of age and goes through adolescence (Scott, 2021).

What behaviors would you expect?

In this stage children start to apply logical rules to abstract concepts and start analyzing the environment. They become concrete thinkers who learns from factual information and real properties as they are observed (Scott, 2021). They have a need for independence and may participate in risky behaviors due to the feeling of being invincible (Ricci et al., 2017).

What did you observe?

I did not witness this patient contributing to Piaget's concepts because he was intubated and sedated and could not express himself.

Vocalization/Vocabulary:

Development expected for child's age and any concerns?

Vocalization and vocabulary are unknown for this patient due to intubation and sedation. It is expected for children this age to use figurative language and sarcasm (Morin, 2020). A 14-year-old may be less communicative and deal with their emotions on their own (Morin, 2020). They can have extensive vocabulary at this age as well (Morin, 2020).

Any concerns regarding growth and development?

No concerns.

Developmental Assessment Reference (1) (APA):

Ricci, S. S., Carman, S., & Kyle, T. (2017). *Maternity and pediatric nursing* (3rd ed.). Wolters Kluwer.

Scott, H. K. (2021, April 30). *Piaget*. StatPearls [Internet]. https://www.ncbi.nlm.nih.gov/books/NBK448206/.

Morin, A. (2020). *Is Your 14-Year-Old Teen Developing Normally?* Verywell Family. https://www.verywellfamily.com/14-year-old-developmental-milestones-2609026.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/ family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Risk for trauma/suffocation related to pneumothorax as evidence by diminished breath sounds.	A pneumothorax can cause respiratory distress that could potentially lead to suffocation.	1.Secure tubing connection sites. 2.Teach family to report sound of bubbling, signs of chest pain, or disconnection of equipment.	Family members will recognize the need for/seek assistance to prevent complications. Correct/avoid environmental and physical hazards.
2. Ineffective breathing pattern related to pneumothorax as evidence by diminished breath sounds.	A pneumothorax can cause patient to have difficulty breathing.	1. Auscultate breath sounds. 2.Note chest excursion and position of trachea.	Established a normal/effective respiratory pattern with ABG's within patient's normal range. Free of cyanosis and other signs and symptoms of hypoxia.
3. Impaired gas exchange related to pneumothorax as evidence by initial ABG results	ABG results showed respiratory alkalosis.	1. Monitor respiratory rate. 2. Assess level of awareness.	Improved ventilation and adequate oxygenation. ABG acceptable limits.
4. Disturbed body image related to	Patient has wounds, drains,	**1.** When patient is extubated assess	The goal is for the patient to express how

critical care as evidence by wounds.	and his abdomen is open with a wound vacuum so he will have a large scar when it heals.	the result of body image disturbance. **2.** Evaluate the patient's behavior regarding the actual or perceived changed body part or function.	he views his body after critical care. Patient will be assessed in his ability to carry out daily roles and activities. Patient will accept the feelings of disturbed body image as a normal response to what has occurred.

Other References (APA):

Martin, P. (2021, June 11). *Nursing Guides, Care Plans, NCLEX Practice Questions*. Nurseslabs. https://nurseslabs.com/.

Concept Map (20 Points):

Subjective Data

Patient tried ripping off gown as an indicator of being hot.
Patient reached for the nurse; the nurse grabbed his hand assuming he needed comforted.
Patient trying to fight sedation by opening eyes and reaching for things.

Nursing Diagnosis/Outcomes

Risk for trauma/suffocation related to pneumothorax as evidence by diminished breath sounds.
Outcome: Patient has clear breath sounds and unlabored breaths.
Ineffective breathing pattern related to pneumothorax as evidence by diminished breath sounds.
Outcome: Patient has unlabored breathing and chest rises and falls symmetrically.
Impaired gas exchange related to pneumothorax as evidence by initial ABG results.
Outcome: Patient oxygen saturation and ABG is within normal limits.
Disturbed body image related to critical care as evidence by wounds.
Outcome: Patient demonstrates coping mechanisms with any disturbances of his image.

Objective Data

Vital signs are stable.
Patient had an elevated glucose of 139.
Chloride is elevated at 107.
Alkaline phosphate is high at 133.
Temperature is at 100.4 which is classified as a fever.

Patient Information

This patient is a 14-year-old African American male that was sent to Carle hospital to receive critical care. He has no past medical history or surgical history in the chart. He weighs 182.8kg. He is a full code status and has no known allergies.

Nursing Interventions

Secure tubing connection sites.
Teach family to report sound of bubbling, signs of chest pain, or disconnection of equipment.
Auscultate breath sounds.
Note chest excursion and position of trachea.
Monitor respiratory rate.
Assess level of awareness.
When patient is extubated assess the result of body image disturbance.
Evaluate the patient's behavior regarding the actual or perceived changed body part or function.