

N433 Pediatrics Clinical Care Plan

CLINICAL

DATE 08/31/2019

Patient's Age 2 years (24 months)

Weight (in kg) 13.4 kg

BMI 16.82 kg/m²

Year's months

Allergies/Sensitivities to medications, foods, contact, environmental, etc. Include reactions: Milk containing products

Chief Complaint (Reason for admission): Increased secretion from trachea site and feeding intolerance

Admit date: 08/28/19

Other co-existing conditions: Lower respiratory illness with positive cultures

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

2 year old non-verbal African American female with history of prematurity with trach and G-tube feeding. Patient presented to Carle Emergency department for worsening secretion and g-tube feed intolerance. Patient was seen in ED room with foster mother at the bedside. Patient was recently discharged from Carle on 8/14 for lower respiratory illness with positive cultures. Patient was to be discharged on Levaquin but due to insurance issues, the medication was not issued until 3 days post discharge so condition got worst.

Pertinent Events during this Admission and Hospitalization (IV starts, lab test, etc.): Blood drawn for labs such as CBC. Sputum culture was also sent to the lab . IV peripheral posterior right hand (08/28/19).

Past Medical & Surgical History (illnesses, hospitalizations, immunizations, birth history-any complications?) Abdominal distension. Acute respiratory failure with hypoxia. Apnea of prematurity. Ileus. Extremity low birth weight newborn Tracheal stenosis. Viral upper respiratory infection. Infection due to parainfluenza virus3

Child's diagnosis: Acute tracheitis **Etiology of disease process**
(what causes it): _____

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) Tracheitis is an infection of your trachea. When caused by bacteria, it's known as bacterial tracheitis. This condition is rare and usually affect young children. It can

lead to life-threatening complications (Burke, 2016). Signs and symptoms include high fever, deep severe cough, difficulty breathing, wheezing, nasal flaring, and cyanosis; a blue tinge to their skin. Bacterial tracheitis is caused by streptococcus pneumonia, hemophilic influenza and Moraxella catarrhalis (Burke, 2016). Most cases develop after a common cold or flu. Tracheitis is diagnosed by a nasopharyngeal culture, a tracheal culture, blood tests to measure child's level of blood oxygen, an X-ray of child's airways, and endoscopy; which is a nonsurgical procedure that allows your child's doctor to view the throat using a thin tube with a camera (Burke, 2016). The doctor will give the child antibiotics to kill the bacteria causing the infection. The antibiotic is administered intravenously (burke, 2016). **Reference** _

_____ Burke. (2016). Bacterial Tracheitis: Causes, Symptoms, and Diagnosis. Retrieved from <https://www.healthline.com/health/tracheitis>

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

_ Signs and symptoms include high fever, deep severe cough, difficulty breathing, wheezing, nasal flaring, and cyanosis; a blue tinge to their skin

_____ <https://www.healthline.com/health/tracheitis>

Vital Signs: (List your source for the Normal ranges) 36.6 degree Fahrenheit_

96 HR. _____ 60-100 (NL for age) _____ 24_ RR. _____ 20-25 (NL for age) _____ 114/65_ B/P

_____ 100-120/60-70_ (NL for age) _____ O2 sat _____ 98% _____ Room Air or Oxygen _Room air

Normal range source: PEDS notes

Intake/Output: (IV, PO, Out & Deficits) _IV peripheral posterior right location

(hand) _____ Intake(NPO) _____

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

General appearance: Patient is non-verbal, non-toxic appearance, patient is alert and oriented

Head: normocephalic and nontraumatic

Ears: normal hearing is evident, no scars or scabs

Eyes: PERRLA, conjunctiva clear, coordinated eye movement/contact

Thyroid: Couldn't palpate thyroid due to tracheostomy tube

Chest: Lungs sound clear bilaterally throughout, breathing is non-labored. No secretion or respiratory distress

CV: S1/S2 heard clearly with no murmur, rubs, or gallops, good pulses, good perfusion throughout.

Abdomen: Soft, non-tender. G-tube healthy. BM sounds normal

GU: No genital or rectal abnormalities

Musculoskeletal: No joint swelling, muscles strength equal on both sides

Extremities: Moving all extremities bilaterally

Skin: moist/warm, no rash appearing bilaterally. No cyanosis or edema

Other: n/a

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: Patient was in no pain when I took care of her. Patient is non-verbal.

Lab Tests:

TEST	NORMAL			
	(specific for age)	Prior	Clinical Day	Correlation to current health status & comment on trending (comment only on abnormal lab results)
RBCs	4.19-9.43	4.42	n/a	
Hgb	10.8-13.3	12.0	n/a	
Hct	33.4-40.4 %	37.3%	n/a	
MCV	80-96.6	84.4	n/a	
MCH	31.5-34.2	27.1	n/a	
MCHC	31.5-34.2	32.2	n/a	
WBCs	4.9-9.43	5.17	n/a	
Neutrophils	1.82-7.47	1.7	n/a	
Eosinophils	0.02-0.32	0.4	n/a	Eosinophils are fighting the bacteria. It increased due to the bacterial infection(Davis's laboratory and diagnostics))
Basophils	0.01-0.05	9.7	n/a	Infections in the trachea (Davis's laboratory and diagnostics)
Monocytes	0.19-0.72	62.5	n/a	Infections in the trachea'(Davis's laboratory and diagnostics)
Lymphocytes	1.16-3.33	n/a	n/a	
Platelets	194-345	n/a	n/a	
TEST	NORMAL			
	(specific for age)	Prior	Clinical Day	Correlation to current health status & comment on trending (comment only on abnormal lab results)
Glucose	60-99	68	n/a	
Na ⁺	136-145	137	n/a	
Cl ⁻	98-107	105	n/a	
K ⁺	3.5-5.1	4.2	n/a	
Ca ⁺⁺	8.5-10.1	10.2	n/a	
Phosphorus		n/a	n/a	
Albumin	3.4-5.0	n/a	n/a	
Total Protein	2.4-4.1	n/a	n/a	
BUN	7-18	n/a	n/a	
Creatinine	0.55-1.02	0.39	n/a	

TEST		NORMAL		
		Prior	Clinical Day	(Correlation to current health status & comment on trending) (Specific to page)
Liver Function Tests	ALT: 7-56 AST: 10-40	n/a	n/a	n/a
Urinalysis	n/a	n/a	n/a	n/a
Urine specific gravity	1.003-10.35	n/a	n/a	n/a
Urine pH	5.0-7.0	n/a	n/a	n/a
Creatinine clearance	0.55-1.02	n/a	n/a	n/a
Other Labs: Sputum screen				Abnormal- no squamous epithelial cells mixed with bacterial flora

DAVIS'S COMPREHENSIVE MANUAL OF LABORATORY AND DIAGNOSTIC TESTS WITH NURSING IMPLICATIONS - 8th Ed. (2019)/ Carle Peds floor

Diagnostic Studies:

TEST & RESULTS	Correlation to current health status (if abnormal)
Chest x-ray:	n/a
CT Scan/MRI:	n/a
Biopsy/Scope:	n/a
Cultures:	n/a
Other: Sputum screen	Abnormal-no squamous epithelial cells. Mixed bacterial flora

List of active orders on this patient:

ORDER	COMMENTS/RESULTS/COMPLETION
Activity:	
Diet/Nutrition: NPO	Patient was being fed through a G-tube
Frequent Assessments: Monitor skin/mucous integrity	
Labs/Diagnostic Studies: Sputum culture, CBC, BMP	Sputum culture came back abnormal- no squamous epithelial cells, mixed bacterial flora

Treatments: Strict I and O (Tube feeding). Continuous pulse oximetry/supportive respiratory care, including NS nasal drops and NG suction as indicated	
New Orders for Clinical Day	
ORDER	COMMENTS/RESULTS/COMPLETION
Not applicable	n/a

Teaching & Learning: Identified teaching need (be specific): I will teach the foster mother how to properly care for a tracheostomy tube and make sure the kid takes her medications on time_____

Summarize your teaching (prioritization in care, methods used, materials used, time to provide, etc.): _Even though, K.C is non-verbal, I would still include her in the teaching by telling her how to be still when her mother is caring for her tracheostomy care and make sure she knows not to put anything into her tracheostomy tube. During my clinical, I was unable to do much for K.C because she was feeling so much better, her infections were already almost gone. I took her vitals, assist the nurse when he was giving her, her medications through her G-tube. I tried to play with her a little bit by asking her to show me what she was doing when she was playing with her doll and driving her little car._____

Evaluation of your teaching (establish expected outcomes and describe if met; effectiveness of materials/approach, what next?):
_I believe the teaching was effective because the foster mom was very attentive when I was talking to her and she asked questions and also demonstrated to me how she cares for the tracheostomy tube at home.

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. Shows a wide range of emotions

2. Dresses and undress self

3. Normal weigh(13.3 kg)

Age Appropriate Diversional Activities

1. Riding on her little car

2. Playing with her doll/ role playing

3. Playing with toys

Psychosocial Development: Which of Erikson’s stages does this child fit? At 2 year’s old, she is in at the stage of autonomy vs shame

What behaviors would you expect? The 2 year old will be building a sense of autonomy, by choosing her own clothes and try to dress herself. If the parents are not letting her challenge herself by choosing her own outfits then she will begin doubting herself.

What did you observe? K.C is non-verbal but she was able to choose what she wanted to wear by pointing at one of the sock choices her mom gave her.

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

What behaviors would you expect? Pretends and fantasizes more creatively, follows three-part commands, remembers parts of a story, recognizes and identifies common objects and pictures, can count/understand the concept of counting

What did you observe? K.C was able to identify cars/animals in books when you ask where is the dog or cat

Vocalization/vocabulary: Development expected for child’s age and any concerns? Can say name, age, gender, answers simple questions and ask “why”

Any concerns regarding growth and development? K.C is growing and developing well except she is nonverbal which makes it hard for her to communicate but she is able to smile, play, do things on her own.

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

Potential Complication	Signs/Symptoms	Preventative Nursing Actions
1. Airway obstruction can lead to death	Confusion Gaspings for air Difficulty breathing air Cyanosis High pitched breathing such as wheezing Panic unconsciousness	Suction airway as needed Check vital signs(H.R/ Respiratory rate) Listening to lungs ound

2. Pneumonia	Chest pain Fatigue Cough, Fever Shortness of breath Confusion	Make the child is vaccinated Practice good hygiene Keep the child immune system strong
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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>Impaired gas exchange</p> <p>Related to: Collection of mucous in airways</p> <p>AEB (as evidenced by): the way patient was having difficulty breathing</p>	<ol style="list-style-type: none"> 1. Patient will maintain optimal gas exchange as evidence by arterial blood gasses with the client's normal range. 2. Patient will demonstrate a relax breathing and no further reduction in the level of consciousness 	<ol style="list-style-type: none"> 1. Assess the respiratory rate, rhythm, quality, depth, and effort. Rapid and shallow breathing patterns and hypoventilation affect gas exchange. 2. Auscultate lung sounds, noting and areas of decreased ventilation or the presence of weird sounds. Irregular/ absence of lungs sound will indicate a impaired gas exchange 1. Place patient in semi-fowler's to high fowler's position. Placing patient in a high fowler's position will help patient breathe better 	<p>Outcomes Met/ Partially met/ Not met (with Explanation)</p> <ol style="list-style-type: none"> 1. Outcome met. Patient was able to breathe normally. No rapid or shallow breathing patterns were presented. 2. Patient's bead was elevated at a 90 degree to promote a more relaxing breathing and improve air exchange. <p>What next? Patient's airway was</p>

		<ol style="list-style-type: none"> Assess for changes in the level of consciousness. Changes in behavior and mental status can be early signs of impaired gas exchange 	<p>clear and was breathing normally. If airways wasn't cleared and breathing was not normal then, the nurse would have used tracheal suction as needed</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 With rationale (At least 2 nursing interventions per outcome)	Evaluation of <u>EACH</u> outcome
<p>Deficient knowledge</p> <p>Related to: intervention in hospital</p> <p>AEB (as evidenced by): expressed need for more information</p>	<ol style="list-style-type: none"> Client or caregiver will demonstrate the knowledge and skills appropriate for tracheostomy care. Patient shows motivation to learn 	<ol style="list-style-type: none"> Provide an atmosphere of respect, openness, trust, and collaboration. Conveying respect is especially important when providing education to patients. Include the patient in creating the teaching plan, beginning with establishing objectives and goals for learning at the beginning of the session. Goal settings allow the learner to know what will be discussed and expected during the session 	<p>Outcomes Met/ Partially met/ Not met (with explanation)</p> <ol style="list-style-type: none"> Nurse provides important education and caregiver demonstrated an understanding Outcomes were met. Caregiver demonstrate the proper technique of how to clean the tracheostomy/ and suctioning

			<p>What next? If patient goes home and caregiver keep struggling, we recommend her to get an actual caregiver or hire a nurse to care for the tracheostomy</p>
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N308 Medication Form

Patient Initials: K.C. _____

Patient Age: 2

Patient Weight (in kg): _____

13.3

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 maximum 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>
Cleocin HCl- trade name (Clindamycin)- generic name Drug class; lincomycin antibiotics It works by slowing or stopping the growth of bacteria in the body. It works by inhibiting bacterial protein synthesis	0.5mg inhaled	To treat the bacterial infection; tracheitis	Couldn't find the inhaler dosage 40mg/kg/ IV every 6- 8 hours Max dose (1,800mg/day) $40\text{mg} \times 13.3\text{kg} = 532\text{mg} \times 2 = 1064\text{mg/day}$ Safe dosage	<u>Side effects:</u> nausea, vomiting, joint pain, heartburn, unpleasant or metallic taste in the mouth, rashes, itching, and hoarseness <u>Contraindications:</u> patients with history of hypersensitivity to medication(clindamycin or lincomycin) Nursing considerations: Assess for infection(check vital signs) Monitor bowel elimination Monitor CBC

<p align="center">Medication</p> <p>Trade & Generic Names, Pharmaceutical Class</p> <p>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</p> <p>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)</p> <p>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 be done to monitor pt. while taking this medication)</p> <p><u>Contraindications</u></p> <p><u>Common side effects</u></p>
<p>Singular- trade name</p> <p>Montelukast- generic name</p> <p>Class: leukotriene antagonists</p> <p>It works in the body by blocking the action of substances in the body that causes symptoms of asthma or allergy</p>	<p>2mg/BID</p>	<p>To prevent wheezing, and shortness of breath</p>	<p>PO children: 4mg/daily</p> <p>Safe dosage</p> <p>4mg=daily</p> <p>2mg*2= 4mg</p>	<p><u>Side effects:</u> hallucinations, aggression, insomnia, nosebleeds, otitis(children), cough, abdominal pain, tremor, stevens-johnson syndrome</p> <p><u>Contraindications:</u> depression, increased eosinophils in the blood, hypersensitivity to drug</p> <p>Nursing considerations: Assess allergy symptoms</p> <p>Monitor closely for changes in behavior</p> <p>Assess lung sounds and respiratory function prior to and periodically during therapy</p>

IV Fluid(D5W-LR)	60mL/hr IV continuous	20mEq/bag Source of calories, electrolytes, and water	100mL*10=1,000mL 50mL*8.5=425 1,425ml/24= 59.375	NC; Assess p/t for history of liver disease Ensure that p/t does not receive more than 5 doses/24 hours Assess pain prior and after giving medication Contraindications: Hypersensitivity, severe hepatic impairment or severe active liver disease Side effects: nausea, vomiting, insomnia, chest tightness, fever, bad cough, itching, and swelling.
DAVIS'S DRUG GUIDE FOR NURSES® - 16th Ed. (2019)				

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. All 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 Divirisional/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	