N432 Newborn Care Plan

Lakeview College of Nursing

Angel Roby

Demographics (10 points)

Date & Time of Clinical Assessment 9/21/2022 @ 0930	**Patient Initials** I.C.	**Date & Time of Birth** 9/19/2022 @ 1322	**Age (in hours at the time of assessment)** 48 hours
Gender Male	**Weight at Birth** **(gm)** 3707 gm **(lb.)** 8 lbs. **(oz.)** 2 oz.	**Weight at Time of Assessment** **(gm)** 3517 gm **(lb.)** 7 lbs. **(oz.)** 7 oz.	**Age (in hours) at the Time of Last Weight** 43 hours
Race/Ethnicity Black/African American	**Length at Birth** **Cm:** 50.8 cm. **Inches:** 20 in.	**Head Circumference at Birth** **Cm:** 35 cm. **Inches:** 13.78 in.	**Chest Circumference at Birth** **Cm:** 33 cm. **Inches:** 13 in.

There are times when the weight at the time of your assessment will be the same as birth

Mother/Family Medical History (15 Points)

Prenatal History of the Mother:

GTPAL: G2P2

When prenatal care started: The prenatal care started approximately 7 weeks following a positive pregnancy urine test. The patient did not have any complications during the most current pregnancy. The patient's other pregnancy had complications, but was not specified during the clinical course.

Abnormal prenatal labs/diagnostics: N/A

Prenatal complications: N/A

Smoking/alcohol/drug use in pregnancy: The patient denied any smoking, alcohol, or drug use during the pregnancy.

Labor History of Mother: Labor history was unable to be evaluated during this clinical course.

Gestation at onset of labor: 39 weeks and 1 day

Length of labor: 12 hours

ROM: This information was not available for the student to see.

Medications in labor: Acetaminophen 50 mg PO PRN Q4H, Oxytocin 30 units IV piggyback administered over 6 hours

Complications of labor and delivery: N/A

Family History: Did not have evidence of anything pertinent to the newborn

Pertinent to infant: Did not have evidence of anything pertinent to the newborn

Social History (tobacco/alcohol/drugs): Did not have evidence of anything pertinent to the newborn.

Pertinent to the infant: Did not have evidence of anything pertinent to the newborn.

Father/Co-Parent of Baby Involvement: Father of baby is involved

Living Situation: An apartment with the father of the child

Education Level of Parents (If applicable to parents' learning barriers or care of infant): N/A

Birth History (10 points)

Length of Second Stage of Labor: 5 minutes

Type of Delivery: Vaginal delivery

Complications of Birth: N/A

APGAR Scores:

1 minute: 8

5 minutes: 9

Resuscitation methods beyond the normal needed: N/A

Feeding Techniques (10 points)

Feeding Technique Type: Breast

If breastfeeding:

LATCH score: 8

Supplemental feeding system or nipple shield: Syringe feeding

If bottle feeding:

Positioning of bottle: N/A

Suck strength: N/A

Amount: N/A

Percentage of weight loss at time of assessment: 4 %

****Show your calculations; if today's weight is not available, please show how you would calculate weight loss (i.e. show the formula)****

Weight loss / Birth Weight x 100

What is normal weight loss for an infant of this age? Yes, the infant should loss up to 10% of their birth weight

Is this neonate's weight loss within normal limits? Yes

Intake and Output (8 points)

Intake

If breastfeeding:

Feeding frequency: the infant had respiratory issues and had to have smaller frequent feedings on the infant's demand through a syringe at the time of assessment. When the infant was breastfeeding, the infant got fed on demand.

Length of feeding session: 10-15 minutes

One or both breasts: Both

If bottle feeding: N/A

Formula type or Expressed breast milk (EBM): N/A

Frequency: N/A

Volume of formula/EBM per session: N/A

If EBM, is fortifier added/to bring it to which calorie content: N/A

If NG or OG feeding: N/A

Frequency: N/A

Volume: N/A

If IV: N/A

Rate of flow: N/A

Volume in 24 hours: N/A

Output

Void

Age (in hours) of first void: 29 hours

Number of voids in 24 hours: 2

Stool

Age (in hours) of first stool: 32 hours

Type: Meconium

Color: Green/brownish

Consistency: Sticky

Number of times in 24 hours:

Laboratory Data and Diagnostic Tests (15 points)

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

Name of Test	Why is this test ordered for any infant?	Expected Results	Client's Results	Interpretation of Results
Blood Glucose Levels	Blood glucose levels are a good indication whether or not a baby is hypoglycemic. This test is ordered if the mother had gestational diabetes, if the infant is born small or large for gestational age and other known medical conditions (Ricci et al., 2021).	70-140 mg/dL	69 mg/dL	The patient's current blood glucose may be low because the patient is getting fewer feeding times because of respiratory issues**.**
Blood Type and Rh Factor	The blood type and Rh factor is essential in case the infant may need blood products, the Rh factor is essential as well to determine whether or not the mother may need Rhogam (Ricci et al., 2021).	Rh+ or Rh- If the mother is Rh-, the mother would have to be on Rhogam in case the infant is Rh+ for the antibodies (Ricci et al., 2021).	O+	The patient is Rh+ and will need an intervention since the mother is Rh-.

Coombs Test	The Coombs test checks the blood for antibodies that attack red blood cells (Ricci et al., 2021).	Negative	Positive	A positive Coombs test can indicate that the body is attacking the red blood cells and can be caused by anemia or jaundice. It is essential to do additional lab tests to rule complications as mentioned above.
Bilirubin Level (All babies at 24 hours) ***Utilize bilitool.org for bilirubin levels***	The bilirubin level is essential in assessing liver function. The bilirubin checks for jaundice in infants (Ricci et al., 2021).	<0.5	0.5	The patient is within normal limits for the bilirubin and will need no intervention at this time.
Newborn Screen (At 24 hours)	The newborn screen identifies potential complications and conditions (Ricci et al., 2021).	Negative	Results will not be available.	Results will not be available.
Newborn Hearing Screen	The newborn hearing screen determines if an infant has significant hearing loss (Ricci et al., 2021).	Passed	Passed	The patient passed the hearing screen and does not need further intervention.
Newborn Cardiac Screen (At 24 hours)	The newborn cardiac screen determine congenital defects and conditions (Ricci et al., 2021).	O2 saturation: 95-100% room air	O2 saturation: 90% nasal cannula	The patient had a sudden drop in respiratory status after a circumcision. The patient is currently on nasal cannula and is being

				evaluated by RT and the nurse.

Lab Data and Diagnostics Reference (1) (APA):

Ricci, S. S., Kyle, T., & Carman, S. (2022). *Maternity and pediatric nursing* (4th ed.). Wolters Kluwer.

Sarah Bush Lincoln Health Center (2022). *Laboratory results.* Sarah Bush Lincoln Health Center.

Newborn Medications (7 points)

Brand/Generic	**Aquamephyton (Vitamin K)**	**Illotycin (Erythromycin Ointment)**	**Hepatitis B Vaccine**	**Cidomycin/ Gentamicin**	**Principen/ Ampicillin**
Dose	1 mg/0.5 mL	0.25 in.	10 mcg/0.5 mL	15 mg	185 mg
Frequency	Once	Once	Once	Once	Q4H
Route	Intramuscular	Eyes	Intramuscular	Intramuscular	Intramuscular
Classification	Therapeutic: Antidote Pharmacologic: Fat soluble vitamin (Jones & Bartlett, 2020)	Pharmacologic: Macrolide Therapeutic: Antibiotic (Jones & Bartlett, 2020)	Pharmacologic: Immunoglobulin Therapeutic: Immunization/vaccine (Jones & Bartlett, 2020)	Pharmacologic: Aminoglycoside Therapeutic: Antibiotic (Jones & Bartlett, 2020)	Pharmacologic: Aminopenicillin Therapeutic: Antibiotic (Jones & Bartlett, 2020)
Mechanism of Action	Assists in clotting factors (Jones & Bartlett, 2020)	Inhibits RNA-dependent protein synthesis in bacterial cells,	Passive immunity to the Hepatitis B infection (Jones & Bartlett, 2020)	Binds to negatively charged sites on the outer cell	Inhibits bacterial cell wall synthesis. This action

		causing them to die (Jones & Bartlett, 2020).		membrane of bacteria disrupting the mebrane's integrity (Jones & Bartlett, 2020)	causes bacterial cell lysis and death (Jones & Bartlett, 2020)
Reason Client Taking	Prophylaxis in bleeding precautions. Infants do not have the ability to stabilize clotting factors.	Prophylaxis for conjunctivitis or any type of infection that may transfer through the eyes	Routine/ prophylaxis immunization for the Hepatitis B infection	Suspected respiratory infection	Suspected respiratory infection
Contraindications (2)	Renal impairment, Excessive coagulation (Jones & Bartlett, 2020)	Statin medications, hypersensitivity to macrolide antibiotics or their components (Jones & Bartlett, 2020**)**	Hypersensitivity to the components of the Hepatitis B vaccine, Sensitivity to yeast (Jones & Bartlett, 2020)	Hypersensitivity to gentamicin other aminoglycosides or their components (Jones & Bartlett, 2020)	Hypersensitivity to ampicillin, infection caused by penicillinase-producing organism (Jones & Bartlett, 2020)
Side Effects/Adverse Reactions (2)	Allergic reaction, cardiac arrest (Jones & Bartlett, 2020)	Hepatotoxicity, prolonged QT interval (Jones & Bartlett, 2020)	Mild fever, Inflammation (Jones & Bartlett, 2020)	Hypotension, Neurotoxicity (Jones & Bartlett, 2020)	Laryngeal stridor, throat tightness (Jones & Bartlett, 2020)
Nursing Considerations (2)	Ensure that the patient does not show any signs and symptoms of an allergic reaction. If administering the hepatitis B vaccine, ensure the patient is getting it on separate thighs to evaluate for inflammation and anaphylaxis (Jones & Bartlett, 2020)	When administering the medication, ensure the medication is applied on the outer corner of the lid in a ribbon like motion Monitor for signs of redness and irritability (Jones & Bartlett, 2020)	Ensure that the dosage being administered is the right dosage according to the weight of infant When administering medication, put it in the opposite thigh of the Vitamin K injection to better assess for irritation (Jones & Bartlett, 2020)	Expect to adjust dosage based on peak and trough blood drug levels drawn after third maintenance dose Be aware that premature infants have an increased risk of nephrotoxicity (Jones & Bartlett, 2020)	Notify prescriber if patient has evidence of superinfection; expect to stop drug and provide appropriate treatment Expect to give this medication for 48 to 72 hours after patient becomes asymptomatic

					(Jones & Bartlett, 2020)
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Monitor coagulation studies such as PT/INR (Jones & Bartlett, 2020).	Monitor infants for vomiting or irritability with feeding because infantile hypertrophic pyloric stenosis has been reported (Jones & Bartlett, 2020)	Administer the injection in the opposite thigh of the Vitamin K injection. Monitor for signs and symptoms of infection and irritation (Jones & Bartlett, 2020)	Assess patient for evidence of other infections because this medication may cause overgrowth of non susceptible organisms Expect to obtain a body fluid or tissue specimen for culture and sensitivity is ordered (Jones & Bartlett, 2020)	Monitor patient closely got anaphylaxis, which may be life-threatening Closely monitor results of renal and liver function tests and CBCs if long-term or high-dose is required (Jones & Bartlett, 2020**)**
Client Teaching needs (2)	Educate the mother about potential bleeding as a complication and ensure the patient's mother understands the bleeding precautions that need to be put in place. Educate the patient on signs and symptoms of bleeding such as abnormal bleeding, blood in the urine, and blood in stool. (Jones & Bartlett, 2020)	Know the signs and symptoms of an infection Monitor for signs of dehydration because vomiting or irritability while feeding can occur (Jones & Bartlett, 2020)	Educate the patients on the importance of the Hepatitis B vaccine and what it will do for the infant in the future Educate the parents on the signs and symptoms of infection (Jones & Bartlett, 2020)	Emphasize importance of completing full gentamicin therapy Instruct patient to report immediately adverse reactions, such as hearing loss, to avoid permanent effects (Jones & Bartlett, 2020)	

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2020). *2021 Nurse's drug handbook* (20th ed.). Jones & Bartlett Learning.

Newborn Assessment (20 points)

Area	Your Assessment	Expected Variations and Findings *This can be found in your book on page 622 in Ricci, Kyle, & Carman 4th ed 2021.
Skin	Skin is slightly yellow, warm, dry, and intact. Skin turgor is elastic and is within normal limits. No bruises, rashes, or wounds.	Smooth, flexible, good skin turgor, well hydrated, warm (Ricci et al., 2021).
Head	Head is normocephalic, round, midline, suture lines are present, no signs of edema or abnormalities. Head circumference was measured at 13.78 inches.	Varies with age, gender, and ethnicity (Ricci et al., 2021).
Fontanels	The fontanels are palpable both posterior and anterior. Posterior and anterior fontanels are firm and flat. No signs of bulging or sinking on both posterior and anterior.	Anterior and posterior firm and flat (Ricci et al., 2021).
Face	Face is symmetrical, cheeks are warm and full, no unusual marks, bruises, or rash.	Full cheeks, facial features symmetrical (Ricci et al., 2021).
Eyes	Eyes are symmetrical and midline. Sclera is white with no signs of jaundice.	Clear and symmetrically placed on face, outline with ears (Ricci et al., 2021).
Nose	Nose is symmetrical and midline. Nare patent with no signs of discharge.	Small, placement in the midline and narrow, ability to smell (Ricci et al., 2021).
Mouth	Mouth is midline and symmetrical. The mucous membranes are pink, patent, and soft. No signs of abnormalities	Aligned in midline, symmetric, intact soft and hard palate (Ricci et al., 2021).

	or irritation.	
Ears	Ears are symmetrical and midline. Hearing screen was done and the infant passed the screening.	Soft and pliable with quick recoil when folded and released (Ricci et al., 2021).
Neck	Neck is short and creased. Head moves with no signs of difficulty, the infant holds their head midline.	Short, creased, moves freely, baby holds head in midline (Ricci et al., 2021).
Chest	Chest is round, symmetrical, and smaller than the head. Chest circumference was measured at 13 inches at birth.	Round, symmetric, smaller than head (Ricci et al., 2021).
Breath Sounds	Lung sounds are equal and clear bilaterally on the anterior. The patient is exhibiting tachypnea. The infant is slightly retracting and was on oxygen via nasal cannula.	Lung sounds clear, bilateral, and equal (Ricci et al., 2021).

Heart Sounds	Heart sounds show S1 and S2 with a slight murmur which is common in infants. The pulse is strong with a regular rhythm.	Ignore the boxes below	Strong pulse, regular rhythm (Ricci et al., 2021).
Abdomen	The abdomen is protuberant and soft. No signs of rash, bruises, or scars.		Protuberant contour, soft (Ricci et al., 2021).
Bowel Sounds	The bowel sounds are active and heard in all four quadrants.		Bowel sounds active, heard in all four quadrants (Ricci et al., 2021).
Umbilical Cord	Umbilical cord is dry with the clamp still attached. No signs of redness or infection.		Three vesicles in umbilical cord (Ricci et al., 2021).
Genitals	Smooth glans, meatus is centered at the tip of penis. Infant is circumcised.		Smooth glans, meatus centered at tip of penis (Ricci et al., 2021).
Anus	Patent		Patent (Ricci et al., 2021).
Extremities	Extremities are symmetrical and move freely. Shows no signs of contractures or stiffness.		Symmetric with free movement (Ricci et al., 2021).
Spine	Spine is symmetrical and intact without any openings and is		Intact, without masses or openings, midline (Ricci et al.,

	midline.		2021).
Safety ● **Matching ID bands with parents** ● **Hugs tag** ● **Sleep position**	The infant has matching ID bands with parents. The hug tag is on the ankle. The sleeping position is supine in the nursery.		Baby has matching ID bands with parents and wears a hugs tag. Baby is sleeping on their back (Ricci et al., 2021).

Vital Signs, 3 sets (6 points)

Time	**Temperature**	**Pulse**	**Respirations**
Birth 1330	37.2 degrees celsius	120 bpm	50 breaths/min
4 Hours After Birth	Unable to access	Unable to access	Unable to access
At the Time of Your Assessment 0900	37 degrees celsius	136 bpm	90 breaths/min

Vital Sign Trends: The infant's vital signs trended down since birth. The patient's respirations are the main concern during the assessment.

Pain Assessment, 1 set (2 points)

Time	**Scale**	**Location**	**Severity**	**Characteristics**	**Interventions**
0900	NPASS	N/A	0/10	N/A	N/A

Summary of Assessment (4 points)

Discuss the clinical significance of the findings from your physical assessment:

This neonate was delivered on 9.19.22 at 1322 by induced vaginal delivery. The Apgar scores were 8/9. The new Ballard scale assessment revealed neonate is 39 0/7 weeks and normal for gestational age. The prenatal history shows no pertinent complications. The birth weight was 8 lbs 2 ozs (3707 grams); length was 20" (50.8 cm). Upon assessment all systems are within normal limits besides the respiratory system. The infant has a suspected respiratory system with high respirations and is showing slight retractions of the abdomen. The last set of vitals was: 37/136/90. Breath sounds after delivery were WNL with the lowest being 50. The neonate was breastfeeding and nursing well with most feedings 20"/20" Q2-3 hours. The neonate is currently getting syringe feedings on demand. The neonate is expected to be discharged to Carle Foundation Hospital for further inspection of the respiratory situation.

Nursing Interventions and Medical Treatments for the Newborn (6 points)

Nursing Interventions and Medical Treatments (Identify nursing interventions with "N" after you list them, identify medical treatments with "M" after you list them.)	**Frequency**	**Why was this intervention/ treatment provided to this patient? Please give a short rationale.**
Vitamin K injection - M	The intramuscular Vitamin K injection is administered once with 1 hour after birth	The Vitamin K injection is prophylaxis for bleeding. Infant's don't have sufficient clotting factors which puts them at risk for bleeding.
Gentamicin - M	The gentamicin was given once	The gentamicin was administered because the infant was suspected to have a respiratory infection.
Respiratory assessment - N	The respiratory assessment was done every 2 hours	The respiratory assessment was done because the infant had a suspected respiratory infection and the patient's respirations were abnormally high at 90 breaths/min.
Educate parents on next steps on respiratory issues - N	The education is provided before transfer to Carle Foundation	The infant's respiratory status was not improving and since the Sarah Bush Lincoln Hospital was not equipped with the sufficient materials to care for the

	Hospital.	patient further, transfer was discussed.

Discharge Planning (2 points)

Discharge location: Carle Foundation Hospital

Equipment needs (if applicable): N/A

Follow up plan (include plan for newborn ONLY): The infant will be discharged to Carle Foundation Hospital for further interventions regarding the infant's respiratory status. Afterwards, the infant will continue to be monitored and assessed in case the respiratory status changes. Well-child visits will be scheduled to evaluate the infant regarding developmental progress, physical changes, and immunizations.

Education needs: The parents will be educated on signs and symptoms of changes in respiratory status and basic newborn care.

Nursing Diagnosis (30 points)
Must be NANDA approved nursing diagnosis and listed in order of priority
Two of the Nursing Diagnoses must be education related i.e. the interventions must be education for the client."

2 points for correct priority

Nursing Diagnosis (2 pt each) Identify problems that are specific to this patient. Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational (1 pt each)** Explain why the nursing diagnosis was chosen	**Intervention/Rational (2 per dx) (1 pt each)** Interventions should be specific and individualized for his patient. Be sure to include a time interval such as Assess vital signs q 12 hours." List a rationale for each intervention and using APA format, cite the source for your rationale.	**Evaluation (2 pts each)** ● How did the patient/ family respond to the nurse's actions? ● Client response, status of goals and outcomes, modifications to plan.
1. Ineffective breathing	The infant is in respiratory	**1.** Assess airway every 2 hours	The patient is still under respiratory distress and

pattern related to suspected respiratory infection as evidenced by retractions of the abdomen	distress	**Rationale -** Maintaining the airway is essential in maintaining oxygen saturation and respirations (Ricci et al., 2021). **2.** Frequent respiratory assessments Q2H **Rationale -** Respiratory assessments are essential in determining any signs of respiratory distress and deterioration (Ricci et al., 2021)	will have to be transferred to a facility that will accommodate the patient. The family is on the fence about transferring the patient and will need to be educated. The patient's respirations were not improving.
2. Risk for impaired gas exchange related to suspected respiratory infection as evidenced by respirations at 90 breaths/min	The infant is in respiratory distress	**1.** Assess for signs and symptoms of labored breathing every 2 hours **Rationale -** Signs such as nasal flaring, grunting, and cyanosis can be all signs of losing oxygen (Ricci et al., 2021). **2.** Administer oxygen **Rationale -** Administering oxygen via nasal cannula will aid in gas exchange (Ricci et al., 2021).	The patient was still in respiratory distress and as mentioned above will need to be transferred to another facility. The patient was given oxygen via nasal cannula and improved slightly, but when oxygen was removed the respiratory status went back to what it was before. The parents were educated on next steps and took the education about the signs and symptoms of respiratory distress.
3. Risk for hypothermia related to infectious process (this diagnosis is related to prevention and does not have any evidence)	The infant has a suspected respiratory infection	**1.** Monitor the infant's temperature every 15 minutes **Rationale -** Accurate temperature measurements are necessary to ensure correct diagnosis and interventions (Ricci et al., 2021) **2.** Monitor for cold stress every 15 minutes **Rationale -** Cold stress results in severe metabolic and physiologic problems (Ricci et al., 2021).	The patient's vital signs were checked every 15 minutes along with the temperature. The temperature was within normal limits throughout the clinical course. The parents were educated on the normal values of temperature.

4. Ineffective coping related to respiratory status as evidenced by infant being irritable and hard to console	The infant is not getting much sleep and has been irritable and hard to console	**1.** Quiet and comfortable environment **Rationale -** A quiet environment will help the infant be comfortable and relaxed (Ricci et al., 2021). **2.** Skin-to-skin contact with caregiver when infant is irritable **Rationale -** Skin-to-skin promotes bonding between the mother and infant and can promote consoling (Ricci et al., 2021).	The patient is improving in consolability. The mother is doing a lot more skin-to-skin contact with the infant. The father is a bit hesitant when it comes to carrying the infant.

Other References (APA):