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Born for Recovery: The Effects of Maternal Methadone Use on Neonates

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Part I – Introduction

Jane Paul, a 27-year-old, gravida 1, para 0, Caucasian female patient, has been using heroin for the past seven years and methadone for the past seven months to withdraw from heroin. She is single and living in an urban city. She currently works part time at a convenience store down the road from her apartment. Jane had been living alone until she found out she was expecting two months into her pregnancy. She does not know who the father is at this time. At the time of insemination, she was not using any form of birth control and did not have a consistent partner. She was tested for the presence of any STDs or prenatal issues at her first obstetric appointment and was found to have no potential issues other than her use of heroin and methadone. When Jane found out she was pregnant, she decided to go to a local clinic to receive methadone to withdraw from heroin. She also moved in with her mother for emotional and financial support. She is currently taking 60 mg of methadone a day. This is the patient's first pregnancy and she has been compliant with her prenatal care. She is excited for this new life change and is currently 38 weeks pregnant.

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Part II – Labor and Delivery

Jane wakes up one evening with tightening of her abdomen, which she describes as "strong menstrual cramps." Jane and her mother go to the hospital. Upon arrival at the emergency department she is bent over in pain. Upon further assessment, the nurse finds that the cervix has begun to dilate and there is a presence of a slightly pink mucous plug in the patient's underwear. The patient's abdominal tightening is assessed and found to be true contractions. She tells the nurse she is full term and that her water broke on the way to the hospital. She is admitted to the delivery unit and confirmed to be in active labor.

Jane's labor is progressing rapidly. Due to the fast progression and use of methadone, Jane's OB/GYN decides to use non-pharmacological pain management rather than medications during labor. The nurse assists Jane with the non-pharmacological pain management such as patterned breathing, position changes, therapeutic touch and massage, and superficial heat and cold as desired by the patient. After being in active labor for five hours and pushing for two hours, the patient gives birth to a baby girl. She decides to name her Skyler.

One minute after birth Skyler's APGAR score was rated as an 8. This is due to her showing slight acrocyanosis as well as diminished reflexes. This could be due to stress from pushing during labor. Skyler's APGAR scores at 5 and 10 minutes increases to 9 due to her reflexes becoming normal, yet still presenting slight acrocyanosis. Skyler gets admitted to the NICU after the vaginal birth and after mother-baby bonding is allowed.

Questions

1. Once the patient is admitted, what are the nurse's priorities?
2. How would the mother's addiction affect the pharmacological control of the labor pain?
3. What are the possible risks for this pregnancy?

Part III – Postpartum Care

An exhausted Jane is taken to the postpartum unit. She decides not to breastfeed and instead decides to bottle feed Skyler. The nurse uses the acronym BUBBLEHE to guide her assessment of Jane. The nurse also assesses for proper adjustment after birth. The patient's assessment is normal other than Jane's complaint of involution pain and her emotional response. The physician prescribes Motrin 600 mg Q4H PRN X 5 days after birth for management of pain due to Jane's history with methadone. Jane fears that her baby will be taken away from her because of her past history of drug use. The nurse encourages Jane to visit Skyler in order to promote bonding and to calm her fears. Jane is given 60 mg methadone daily while in the postpartum unit and is monitored for adverse signs and symptoms. Some examples of adverse signs and symptoms of methadone Jane is being monitored for are feeling anxious, restless, insomnia, diarrhea, constipation, loss of appetite, or feeling weak. She is also being monitored for signs and symptoms of withdrawal, including but not limited to tachycardia, body aches, involuntary movements, sneezing, excessive perspiration, etc.

Jane is discharged after two days and is not exhibiting any signs or symptoms of postpartum complications. She is discharged continuing on 60 mg of methadone per day in order to stabilize her symptoms and is referred to the methadone clinic.

Questions

4. What does BUBBLEHE stand for and what are typical postpartum findings?
5. What are some other interventions the nurse could have done in order to help Jane with her emotional symptoms?

Part IV – Infant Care in the NICU

Skyler receives her first head to toe nursing assessment. She is 7 lbs. 6oz. She is continually monitored, but does not show any signs or symptoms of withdrawal or neonatal abstinence syndrome.

On the second day of life, however, Skyler begins to show signs of neonatal abstinence syndrome such as mild disturbed tremors, loose stools, and difficulty with feeding. Skyler began bottle-feeding after birth. Although she is showing some signs and symptoms of withdrawal, she is not losing any weight and she has a near normal sleep schedule. The doctors decide to not give the newborn withdrawal medications due to her lack of serious withdrawal symptoms. They continue to monitor Skyler for further, more dangerous side effects as well as using supportive care to reduce her symptoms.

Some of the supportive care techniques used by the nurses include minimizing stimulation, swaddling, positioning, and preventing excessive crying with use of non-nutritive sucking with a pacifier. Skyler is assessed by trained staff every three hours with her feedings using the Finnegan scale. This scale rates the level of withdrawal in infants diagnosed with neonatal abstinence syndrome. Her scores range from 7 to 0 and improve significantly as time goes on. She is discharged home with her mother and grandmother after nine days in the NICU.

Questions

6. What does the Finnegan Score indicate?
7. What are some other signs and symptoms of neonatal abstinence syndrome that this baby is not exhibiting?
8. When do signs and symptoms of neonatal abstinence syndrome begin after birth and how are they treated?
9. Can Jane breastfeed Skyler while on methadone? Explain.
10. What are some newborn risks as well as future risks for babies born with neonatal abstinence syndrome?

Part V – Discharge Planning

After nine days in the NICU, Skyler is free from all signs and symptoms of withdrawal and is determined to be stable. During this time the nursing staff has been discussing discharge planning with the mother and grandmother. Being that Jane is a first-time mother working part time and receiving a low income, the nurse provides her with information regarding assistance programs such as WIC and Medicaid. These services will allow her to more adequately provide for her daughter and herself. The nurse who had contacted social services immediately following the birth of Skyler has continued to coordinate with the social worker to follow Jane and Skyler throughout their hospital stays and will continue through their discharge process. Social services can also help the mother to find community support through support groups for drug abusers, single mothers, and the entire family as a whole. The nurse has also contacted a pediatrician for a follow up appointment for the infant in one week. Jane and Skyler are discharged to Jane's mother's house, where she will assist with care of the infant.

Questions

11. What are the guidelines for bathing a newborn baby?
12. What would you teach the mother about car seat safety?
13. Why did the nurse call social services to assess the mother and child?
14. Jane asks the nurse what WIC is; what should the nurse tell her?