APH MS3 Nursery Cases

Case 1:

Diana Krall is a term 1 day old female infant born to a 29-year-old G3P2002 mother via spontaneous vaginal delivery. Pregnancy and delivery were uncomplicated. Maternal prenatal labs were negative. Mom has chosen to bottle feed her infant and Diana has been tolerating 15-30 mL per feed every 3 hours. She voided once yesterday and today. She stooled twice yesterday and once today. Mom is anxious to return home to her other children and ask when she can leave.

What screening tests are completed prior to discharge?

Are there any other interventions to consider prior to discharge?

Based on AAP guidelines when are infants safe to go home? What about criteria for early discharge?

When should infants be seen by their pediatricians?

Teaching Points:

1) Outline normal newborn behavior and common parent questions during a nursery stay.
2) Discuss basic newborn cares during a typical nursery stay.
3) Discuss discharge criteria for infants in the newborn nursery including early discharge criteria.
4) Discuss when newborns needs to be followed up and outline factors that affect this decision.

Resources:

- Well Newborn PIR 2012: https://867b8bd1-86a9-4608-8885-22f5ded6d780.filesusr.com/ugd/52380c_154c53e97c2c4ca38cf099ba43fbaa2c.pdf
- AAP Hospital Stay Policy 2015: https://867b8bd1-86a9-4608-8885-22f5ded6d780.filesusr.com/ugd/52380c_34402a58a3064da49edf7650b9682cc3.pdf

Case 2:

Ella Fitzgerald is a term 1 day old female infant born yesterday to a 22-year-old G1P0 mom via spontaneous vaginal delivery. Pregnancy and delivery were uncomplicated. This is mom's 1st child and during your rounds she expresses concerns that Ella does not seem to be feeding well. Mom states that she tries to offer the breast every 3 hours but Ella does not seem interested. When she does latch mom states it is painful. Mom has a friend who had trouble breastfeeding and needed to supplement for a week until their milk came in. Mom is wondering if she should do this. Ella's weight is currently 94% of her birthweight.

What are the benefits of breastfeeding?

How often should infants feed? How often should the stool and void?

How do you assess for adequate breastfeeding by history and exam?

What strategies could you recommend to mother's who are struggling with breastfeeding?

Teaching Points:

1) Discuss benefits and risks of breastfeeding including potential contraindications.
2) Discuss normal intake and output for newborn babies.
3) Outline helpful history questions and exam observations for counseling breastfeeding mothers.
4) Highlight common problems with breastfeeding and solutions for patients and families.

Resources:

- Breastfeeding PIR 2011: https://867b8bd1-86a9-4608-8885-22f5ded6d780.filesusr.com/ugd/52380c_4fc3db8ba40243aba494bde48fdb52fa.pdf
- Encouraging Breastfeeding PIR 2017: https://867b8bd1-86a9-4608-8885-22f5ded6d780.filesusr.com/ugd/52380c_9d9337fba3464ff0843ea0636b460af4.pdf

Case 3:

John Coltrane is a term male infant born 24 hours ago to a 29-year-old G2P1001 mother via spontaneous vaginal delivery. Pregnancy and delivery were uncomplicated. Maternal prenatal infectious labs were negative, and her blood type was O+ with negative antibodies. The nurse calls you because the infant appears to be jaundiced and the total transcutaneous bilirubin level is 9.8 (high risk) with a confirmatory total serum bilirubin of 7.0 (high-intermediate risk). The phototherapy threshold is 11.7.

What factors contribute to hyperbilirubinemia? What is your differential diagnosis for this infant's hyperbilirubinemia?

How do you know this infant has hyperbilirubinemia and what is your plan?

The infant remains well appearing and you decide to trend levels. At 36 hours his total serum bili is 11.2 (high risk) with a phototherapy level of 13.6. Based on the trend, decide to obtain a repeat level sooner. The repeat serum level at 42 hours is 14.5 (high risk) with a phototherapy level of 14.5.

How would you like to work-up and manage this patient?

What is disposition for this patient?

Teaching Points:

1) Review the pathophysiology of hyperbilirubinemia.
2) Discuss what factors contribute to physiologic jaundice.
3) Discuss the differential diagnosis for newborn hyperbilirubinemia and outline how these conditions are different than physiologic jaundice.
4) Review the management of newborn hyperbilirubinemia including discharge considerations.

Resources

- Newborn Jaundice PIR 2017: https://867b8bd1-86a9-4608-8885-22f5ded6d780.filesusr.com/ugd/52380c_1ef694344fb0464eb81b016dbbb701e5.pdf
- PTX NNT Peds 2009: https://867b8bd1-86a9-4608-8885-22f5ded6d780.filesusr.com/ugd/52380c_038715d83f6f4bc78d6e08dabcef5025.pdf

Case 4:

Dizzy Gillespie is a term male infant born 2 hours ago to a 24-year-old G1P0 mother via spontaneous vaginal delivery. Pregnancy was complicated by maternal type II diabetes and hypertension. Her prenatal

labs were negative including GBS and her blood type was B+ with negative antibodies. Delivery was uncomplicated. Dizzy is at the 96th %ile for weight, which is large for gestational age. The nurse calls you because he is jittery on exam and his point-of-care blood glucose is 26 and asks for further instructions.

What is considered hypoglycemia in an infant and what risk factors contribute to hypoglycemia?

How does neonatal hypoglycemia present?

What is your differential diagnosis for neonatal hypoglycemia?

How would you manage neonatal hypoglycemia?

Teaching Points:

1) Review the pathophysiology of neonatal hypoglycemia.
2) Outline risk factors for hypoglycemia.
3) Discuss presenting symptoms and signs of hypoglycemia.
4) Discuss the management of neonatal hypoglycemia.

Resources

- Neonatal Hypoglycemia PIR 2017: https://867b8bd1-86a9-4608-8885-22f5ded6d780.filesusr.com/ugd/52380c_fb86bfe6d24a4b28a615ce076aa85695.pdf

Case 5:

Bill Evans is a term male born 6 hours ago to a 32-year-old G2P1001 mother via spontaneous vaginal delivery. Pregnancy was uncomplicated. Maternal labs were negative outside of positive Group B strep (GBS) status. There was spontaneous rupture of membranes at 19 hours and mom received prophylaxis

with ampicillin every 4 hours until delivery. There were no other complications from delivery. On exam Bill is well appearing and mom states she has already attempted to breastfeed twice.

Why do we screen for GBS?

What other risk factors does this infant have for sepsis?

How would you manage this patient?

How would you management change if this patient became ill?

Teaching Points:

1) Describe neonatal sepsis and its relationship to GBS.
2) Outline risk factors that contribute to neonatal sepsis.
3) Explain the management of infants with GBS exposure and infants with early onset sepsis.
4) Describe how the Kaiser Early Onset Sepsis Calculator has changed management of GBS exposure and early onset sepsis.

Resources

- AAP GBS Management Policy 2019: https://pediatrics.aappublications.org/content/pediatrics/144/2/e20191881.full.pdf
- Estimating EOS Peds 2011: https://pediatrics.aappublications.org/content/pediatrics/128/5/e1155.full.pdf