



IAP Neonatology Chapter

IAP Neonatology Fellowship Exam March 2019

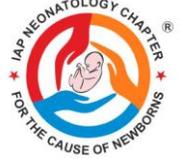
Theory Paper 2

Time – 3 hours

Total Marks – 100

Attempt all questions

1. An Rh negative, gravida 3, para 1 with one spontaneous second trimester abortion comes to the obstetrician for the first visit at 16 weeks. The obstetrician refers the mother to you for antenatal consultation. (4 x 5 = 20)
 - a. What are the relevant factors in the history you would ask from this mother?
 - b. What investigations you would order in the lady at 16 weeks in view of her Rh negative status?
 - c. Make a flow chart to show how you will monitor this lady should she be isoimmunised.
 - d. What are the indications for intrauterine transfusion and delivery in Rh isoimmunisation?
 - e. What special precautions you will take at the time of birth of a baby with immune hydrops?
2. Preterm 28 weeks, 890 gm, born by emergency LSCS in view of reversed end diastolic flow in umbilical artery has mild respiratory distress at birth. Baby is put on nasal CPAP at birth. (5 x 4 = 20)
 - a. When would you like to start enteral nutrition in this baby? What is Minimal Enteral Nutrition and what are its advantages?
 - b. How would you increase the enteral nutrition in this baby? What are the advantages of slow vs fast progression of enteral feeds?
 - c. What are the limitations of breast milk in enteral nutrition of VLBW infants? How can you overcome these limitations?
 - d. How do you monitor growth of such an infant in NICU? What is considered as appropriate growth? What is catch up growth?
3. Preterm 33 weeks, 1800 gm male neonate born by spontaneous preterm delivery is kept for observation in NICU for 3 days and then transferred to mother in a stable condition. Baby is planned for discharge on day 10 but on day 9 of life baby is found to



be lethargic with poor feeding and mottled skin. Baby is transferred to NICU and started on IV fluids. 5 x 4 = 20

- a. What are the likely possibilities in this baby and any clinical finding which may help you arrive at a diagnosis?
 - b. What are the initial investigations you would like to do?
 - c. What is the utility of sepsis screen in diagnosis of late onset sepsis?
 - d. What is the role of IVIG in the prevention and/or treatment of neonatal sepsis? Role of other adjunctive treatments for neonatal sepsis.
4. Early Term, 37 weeks, 3900 gm baby born by Emergency LSCS to Primigravida mother with Uncontrolled Gestational Diabetes in view of decreased fetal movements with non-reassuring foetal heart rate. Baby did not require active resuscitation and was shifted with mother. At 24 hours, baby is noted by the mother to have abnormal body movements, baby was also not feeding well for the last six hours. 5 x 4 = 20
- a. Enumerate the causes of seizures in a term neonate at 24 hours of age.
 - b. Make a flow chart for the management of seizures in a newborn baby.
 - c. What is refractory hypoglycemia and how would you manage a neonate with refractory hypoglycemia?
 - d. What are the prognostic factors in neonatal seizures?
5. An obstetrician has called you to attend the caesarean delivery of a 26 week preterm neonate with an expected weight of 800gms.
- a. How would you counsel this family antenatally? (3)
 - b. Discuss delivery room setup and interventions specific to this resuscitation. (6)
 - c. How would you manage the transport of this neonate by road to your NICU? (3)
 - d. This infant had to be commenced on volume guaranteed ventilation in the NICU. Discuss optimal initial ventilator settings in this case. (4)
 - e. Mention strategies to decrease the risk of chronic lung disease in this infant. (4)