

IAP Neonatology Chapter Fellowship Examination – July, 2014

Time Allowed: 3 Hours

PAPER II

Maximum Marks: 100

Each question carries equal marks.

All questions are compulsory.

1. A preterm 30 weeks, 1.3kg male infant is born to a primi mother due to preterm PROM. He is having respiratory distress right from birth?
  - a. What are the antenatal interventions which would improve the outcome of this newborn (2.5)
  - b. What are evidence based delivery room practices to improve the outcome of this newborn (2.5)
  - c. What neonatal interventions would ensure a good long term neurodevelopment outcome of this newborn (5)
2. A term infant is born to a gravida 2 mother at 39 weeks of gestation with APGARS 0,3,5 at 1, 5 and 10 minutes of life. It was born by emergency C-section due to thick meconium liquor and fetal bradycardia. The cord pH was 6.8 and infant was shifted to NICU on tube and mask ventilation
  - a. Enumerate the principles of transport? (2.5)
  - b. Highlight the best interventions to improve the long term outcome of this newborn (5)
  - c. What are the predictors of long term neurodevelopment of this newborn (2.5)
3. A term 2.5kg infant presents on day 4 for recurrent episodes of hypoglycemia. The sugars are border-line even on a GIR of 15mg/kg/min.
  - a. How will you approach the diagnosis of this case (5)
  - b. What are the medications (drugs, doses, side effects) used in the management of this newborn if the Insulin glucose ratio is 1.5:1 (5)
4. A newborn infant is admitted on day 3 of life with decreasing activity, rapid breathing, cold peripheries and poor feeding for the last 12 hours
  - a. What are the differentials for this condition? (2.5)
  - b. Approach for each of the differential, its investigation and management (7.5)

5. A term healthy newborn (3.9kg) presents at 36 hours of life with jaundice, poor feeding and decreased activity. On investigations the TSB is 19mg/dl
  - a. How will you approach the diagnosis of this newborn (5)
  - b. What are the stages of BIND (2.5)
  - c. How will you prevent in this newborn (2.5)
6. A preterm VLBW infant with a birth weight of 1.1kg and gestation of 29 weeks has a weight gain of 5g/kg/day for the last 1 week in the 4<sup>th</sup> week of life.
  - a. What is the expected growth in this newborn in the fourth week of life (1.5)
  - b. What are the differentials for this weight gain in this newborn (2.5)
  - c. How to prevent post natal malnutrition in these newborns? (6)
7. A 27 weeks, primigravida mother presents to the emergency department with leaking PV and delivers by 2 hours a 1.2 kg, male baby.
  - a) How do you stabilize and monitor on admission? (3)
  - b) How do you optimize the administration of surfactant in this infant with respiratory distress at 2 hours age? (4)
  - c) What measures do you take to prevent complications on CPAP? (3)
8. A 30 weeks baby who is currently 12 days of life has failed extubation twice from ventilator.
  - a) What causes of extubation failure would you consider? (3)
  - b) What are best practices to prevent extubation failure? (4)
  - c) Highlight the predictors for developing chronic lung disease? (3)
9. A 27 week baby who is currently 5 weeks of life is showing poor weight gain and oxygen dependency.
  - a) What are the causes for oxygen dependency? (3)
  - b) How do you evaluate and manage? (4)
  - c) What are the long term consequences? (3)
10. A 27 weeks, 0.7 kg, male, day 2, is on CPAP for RDS.
  - a) What measures do you take to ensure lactation in the mother? (4)
  - b) What are best strategies to prevent development of ROP in such a newborn? (6)

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