DOCTOR’S FELLOWSHIP EXAMINATION – August 2020

Theory Paper 1

ADVANCED NEONATOLOGY, CRITICAL CARE, PERINATOLOGY AND NEONATAL SURGERY

Be brief and to the point

Q1. A full-term baby weighting 3.1 kg was delivered by LSCS because of prolonged labour. Cry was delayed and the baby was resuscitated according to the NRP 2015 guidelines. Write about the following:

a. Criteria for defining HIE 4

b. Criteria for starting Hypothermia treatment protocol and its contraindications 6

Q2. 30 weeks preterm neonate weighing 1.2 kg has started with new-onset apneas on day 3 of life. Discuss

   a. Definition and Etiology of Apnea of prematurity 5
   b. Management plan for the baby. 5
   c. What are the long term outcomes of CAP trial? 5

Q3. 31 weeks female baby, weighing 875 grams is admitted in NICU at 1 hour of life. The baby was born to a mother having PIH and umbilical artery doppler study showing reversal of diastolic flow. Discuss the following: 7+5

   a. Initial nutritional strategies for this baby and the subsequent plan.
   b. What is feed intolerance and how do you manage it?

Q4. A preterm 26 week baby was born by emergency LSCS in view of sudden placental abruption. Mother did not receive any antenatal steroids. Baby was transferred to NICU and was given surfactant and kept on Mechanical ventilation.
On Day 4 of life baby was given a trial of extubation which failed within 2 hours. Repeated attempts to extubate the baby have failed. Baby is now 35 days old (31 weeks post conceptional age) and is still on SIMV mode of ventilation. Discuss the following:  

a. Possible diagnosis and long term management plan for this child  
b. What lung-protective ventilatory strategies you'll adopt for such cases

Q5. Write Short Notes on the following: 5+5+8
a. Hearing screening of NICU graduates  
b. Screening for CHD by the pulse oximeter  
c. Perinatal Covid19 infection and the feeding strategies if mother is positive.

Q6. What do you understand by early developmentally supportive intervention and what are its evidence based benefits? 10

Q7. a. Discuss glucose homeostasis in newborn. 8+5  
   b. Write the causes and management of hyperglycemia in a neonate

Q8. Discuss the recent advances and controversies in the management of PDA in preterm neonates 10