

Monash Practice Written FE

- Question 19 – Septic neonate (18 Marks)

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Q 19

- Septic Neonate Management
 - RCH guidelines
- Pass mark set at 10/18
- Overall pass $32/40 = 80\%$

Q19

MMC Practice Exam Paediatric Resuscitation 18 marks

You are the Consultant in an Urban Emergency Department.

A 6 day old baby presents with lethargy, reduced feeding, reduced wet nappies, pallor and a weak cry.

NVD at term, no anti-natal or post-natal issues.

Vitals : HR 180 temp 38.5degC Cap refill 4sec
 RR 70 sats 98% RA AVPU = P

1. List your initial management priorities? (8 marks)

- Stem : read all the information
 - Urban ED
 - 6 day old
 - Lethargy, reduced feeding/nappies, pallor, weak cry
 - No antenatal/postnatal issues

-OK so could be all sorts of things including sepsis and cardiac BUT

- Vitals

- HR 180 (120-160 – up a bit)
- RR 70 (30-60 – up a bit)
- Febrile 38.5
- Sats 98% RA
- Cap refill 4 secs
- AVPU – P (worrying)

- SEPSIS

Q19

1. Initial Mx priorities (8marks)

- Administration of empiric IV **antibiotics** (?IM if delayed access)
- Summon **help**, team, resus
- Assess **ABC**, oxygen, cardiac monitor, conscious state
- gain IV/IO **access**
- bloods** for culture, VBG, **BSL**, FBE, lactate

- 1. Initial Mx priorities (8marks)
 - **IV fluids:** 20ml/kg,
 - repeat x 1 after reassessment (0.9%Normal Saline)
 - reassess fluid status/overload
 - Gain full **history and examination**
 - **Explanation** to carer/reassurance
 - Will need urine and LP – can defer LP

Feedback

- Review guidelines for septic neonate
- Early IV/IO for fluids/antibiotics
- BSL, BSL, BSL, BSL, BSL, BSL, BSL
 - sick neonate, poor feeding, AVPU = P

- Panadol is not a priority in 6/7 old
- mention parent/carer

- 2. What are the common pathogens in infants <3 months old? (2 marks)
- EColi**
- Grp B Strep**
- Listeria (v. uncommon) HSV ?
- Not Staph

3. What empiric antibiotics should be given? (4 marks)

Antibiotic	Dose
Cefotaxime	50mg/kg
Benzylopen	60mg/kg

1 mark per antibiotic

1 mark per correct dose

- 4. Despite 40ml/kg IV fluid bolus the baby remains shocked. State your further management? (4 marks)
 - Summon extra help – Code/ICU/PIPER
 - Inotrope/vasopressor peripherally
 - Adrenaline 0.05-0.2mcg/kg/min recommended for neonates
 - Can give via periph IV or IO
 - NA (same dose) recommended for older kids
- Adrenaline is preferred for neonates but accepted both

4. Further Mx

- Persistent cardiovascular failure after 40ml/kg fluid requires reconsideration of the diagnosis and ongoing Rx options.
- Respiratory support
 - Conscious state Ok : HFNC/CPAP/BiPAP
 - Ongoing Alt Consc state : ?ETT

4. Further Mx

Feedback

- Metaraminol bolus is unusual choice for neonatal resus
- Adrenaline push dose 10mcg/kg
- ETT in question 1 not part of initial Mx in a neonate who is breathing at 70 with sats 98%RA but becomes part of further Mx if ongoing altered conscious state
- ETT high risk procedure in hemodynamically unstable neonate – get help, prepare for arrest
- Further IV fluid after 40ml/kg without mention of starting vasopressor not accepted

Q19

Marks (x/18)	Number candidates
6	1
7	2
8	3
9	2
10	3
11	11
12	4
13	4
14	7
15	2
16	1

Q19

