Dean

#### Admitting Diagnosis:

Respiratory Tract Infection- ? RSV / Bronchiolitis

**Previous History**: Full term normal delivery. No SCBU.

Previously well baby. No past medical or surgical history.

## History on Admission:

Coryzal symptoms, cough, lethargy & decreased feeding 5 days ago.
Pyrexial up to 39 responding to antipyretics.
Attended GP- advised viral illness
Next day significant disimprovement, mum attended A&E @17.30
On arrival saturating low 80's on room air, cyanosed and significant increased work of breathing. Trialled on high flow with no significant improvement, intubated & ventilated, IV access x1 inserted, arterial line inserted and transferred to PICU.

# PICU History:

Day 1- Admitted to PICU at 0500 from referring A&E.
Nasally intubated & ventilated on SIMV +PC/PS
Arterial line in situ, peripheral access right foot. Second IV line inserted in left hand.
Commenced Cefuroxime & azithromycin in referring hospital

-continued awaiting septic screen & pertussis result.

NPA & virology screen repeated
-RSV negative, Influenza A positive-Tamiflu commenced @ 22.00

Chest x-ray on admission Right upper lobe collapse & left lower lobe consolidation.
Commenced chest physio.
Significant desaturation with coughing spasms.
Morphine & midaz to wean as tolerated, aim COMFORT B of 12-17.
Commenced in NG feeds, titrating IV fluids accordingly.

Day 2- Difficulty oxygenating, required increase PEEP & Oxygen overnight.

Secretions mucopurulent secretions required additional physio review overnight. Significant desat & bradycardia with coughing spasms requiring hand bagging on 100% O2 and sedation bolus to recover. Atracurium bolus x2 overnight for spasms.

Morphine & midazolam increased overnight.

Peripheral line in left foot removed. PVL inserted in right hand.

Full NG feeds tolerated, IV fluids D/C

## DAY 4 ICU - Nurse handover

#### RESP-

4.0 nasal @ 12cm tapes secure Ventilation – SIMV PC/PS Oxygenation challenging overnight. Peep increased to 7, PS 10 - 12 Maintaining TV 5-6mls/kg FiO2 – 40-50 % SaO2- 95-100% RR 35-40 Significant desat & brady with coughing spasm Physio reviewed- TDS treatment, reviewed overnight. Secretions mucopurulent C-xray reviewed- consolidation left lower lobe Suggest a trial of pulmazyme? Bedside screen for readiness to wean- not suitable for SBT on current support.

# <u>CVS-</u>

HR 130-150's at rest, 160's on handling. BP satisfactory CRT 2sec central & peripheries. Femoral pulses palpable. Pyrexia x 1 to 38.3 overnight, did not spike over 38.5 did not require further cultures. Access – PVL X2 patent, Left radial art Dressings intact and secure.

### **BLOODS-**

U&E, Renal function & LFTs normal. HB dipped to 98, CRP up to 87, WCC raised trending down.

### NEURO-

GCS 10/15- responding appropriately to pain/handling. Goes for tube when stimulated/awake. COMFORT Aim set previously at 14-17 Actual 12- 18 – significant desats with associated loss of colour & bradycardia with coughing spasms overnight. Required 8x morphine bolus and 2x atricurium bolus for coughing spasms overnight. Morphine 20mcg/kg/hr, midazolam increased to

2mcg/kg/min overnight. Paracetamol x2

Can we address sedation?

### PLAN TODAY:

- Influenza A positive and still getting worse
- Single organ needs better airway clearance, commence pulmazyme.
- Too awake at present, need to take over ventilation completely and increased sedation to tolerate
- Aim for lower COMFORT B of 10-12 to prevent coughing spasms & fighting vent

## <u>GI-</u>

100ml/kg total intake 93ml/kg NG feed – reviewed by dietician happy with feeds Blood sugar stable Abdo soft- bowel sounds present.

# <u>GU-</u>

UOP 4.1ml/kg/hr Stat dose frusemide yesterday, none overnight. Balance this morning -155ml, overall balance +35mls

Mild periorbital oedema, hand/feet

Passed stool x2 normal consistency, no concerns

#### **INFECTION:**

NPA RSV neg Pertussis neg Virology screen- Influenza A + ve Commenced Tamiflu last night. Full septic screen sent: Secretions- No growth at 24 hours Urine- No growth at 24 hours Blood Cult- no growth at 24 hours. All require follow up. IV antibiotics- Cefuroxime D3, azithromycin D3

Access: ET D3 PVL right hand D1 PVL left hand D2 Art line D3 NG D3

#### SKIN:

Nursed on repose air mattress, pressure areas intact.

#### SOCIAL-

Parents staying alternate nights, resident in parents' accommodation. 2 older siblings sick at home.

- Infection follow up on cultures
- Aim negative balance
- Failed bedside screen- not ready for Spontaneous Breathing Trail yet.
- Ventilation aim for TV 5-6ml/kg, SaO2 >92% wean oxygen as tolerated.
- Not quite ready to wean ventilation or sedation.