Pediatric Scenario – H1N1 Infection, 6 Year old Lucy Lou

Objectives:

1. Recognize hypoxia
2. Recognize mild dehydration
3. Send appropriate lab work
4. Manage hypoxia and dehydration

Scenario: 6 y /o female with 1 day of cough, sore throat, fever, and "not feeling well." Yesterday had a fever 101, and so did not attend school. She has had decreased appetite, and has not been interested in drinking fluids. This afternoon, her mother noted that she has been less active and so she brought her to the emergency room.

Past medical history notable for UTI at 2 moths of age, occasional wheezing and cough treated with Albuterol prn..

Medications: ibuprofen, acetaminophen, multivitamin with iron, albuterol prn.

Review of symptoms: mother reports fever, runny nose, cough, difficulty breathing, vomiting post cough

Physical exam:

T 39.2, P 125, BP 94/62, RR 28, SaO2 88%
Wt: 20 kg

General appearance: Sleepy but awakens to exam
Respiratory: Airway is patent, no nasal flare with intercostal retractions. Breath sounds are coarse with poor entry to the bases. Rales throughout.
Cardiovascular: Skin is warm centrally, cool distally. There is a 2/6 mid-systolic murmur at the upper sternal margins. The extremities are cool distally with faint pulses. Cap refill is 3 seconds.
Neurologic: The infant is sleepy but opens eyes and moves extremities in response to verbal stimulus.

Time	Scenario Progression	Anticipated Actions
0 – 5 Minutes	Assessment	• Assess ABCs • Provide 100% oxygen via blow-by or alternate device – Sats improve to 94% • Place on monitor • Establish IV access • NS bolus 20 cc/kg – should be administered over 5-10 minutes • Order labs: CBC with Diff, Lytes, Glucose, ABG, Blood cultures, viral respiratory panel, CXR • Consider antibiotics

5 – 10 Minutes	Response to oxygen and volume Lab results: Blood glucose – 132 mg/dl ABG – 7.36/38/88/20.5/-2	• Evaluate response - Improved SaO2, improving perfusion and level of activity
15 Minutes	Stabilization and disposition Additional lab results CBC: WBC 6.5 (79% PMN, 11% lymphs, 12% eos), Hct 31, Plts 259 Lytes: Na 141, K 4.3, Cl 109, Bicarb 21, BUN 5, Cr .4	• Determine transfer to tertiary care not needed • Follow up pending labs • Discharge home for follow-up with primary care or admit for observation