

Case 10

You are an F2 working in the paediatric emergency department at General Hospital. Your consultant is Dr Bain.

Your bleep number is 2282

Patient name: Kelly Hawkins

Date of birth: 12th February 2008

Patient number: X354657098

Ms Hawkins has presented with acute shortness of breath. She appears acutely short of breath and is unable to provide a history due to her breathlessness.

On examination the patients lips appear blue and her skin is pale. Her airway appears patent and a widespread expiratory wheeze can be heard on auscultation. She is using her accessory respiratory muscles. Heart sounds are I - II + 0, with a peripheral capillary refill time of <3 seconds. Her abdomen is soft and non-tender.

Investigations

Pulse	122 beats per minute
Blood pressure	100/65 mmHg
Respiratory rate	26 breathes per minute
Oxygen saturations	89% (room air)
Temperature	35.6 degrees Celsius

The patient is started on oxygen 15L/min through a non-rebreather mask and an arterial blood gas is taken.

Chest x-ray and routine blood tests pending.

Arterial blood gas results are below:

Blood Gas

Identification

Patient ID	X354657098
Date of Birth	12 th February 2006
Patient Last Name	Hawkins
Patient First Name	Kelly
FO2	91% (<i>on 15L O2</i>)
Sample Type	Arterial

Blood Gas Values

pH	7.29	(7.35 – 7.45)
PO2	8.3	(11 – 13 kPa)
pCO2	7.7	(4.7 – 6.0 kPa)

Acid Base Status

Bicarbonate	29.8	(22 – 26 mmol/L)
Base Excess	+3.5	(-2 to +2 mmol/L)

Electrolyte Values

Sodium	131	(133–146 mmol/L)
Potassium	3.9	(3.5–5.3 mmol/L)
Chloride	96	(95-108 mmol/L)

Metabolite Values

Glucose	4.4	(3.0-7.8 mmol/L)
Lactate	1.2	(0.5 – 2.2 mmol/L)

Task

Please report and interpret the results of the arterial blood gas on hospital notepaper.

Make sure to include the most likely diagnosis and what the next steps in management should be.

Hospital:

Patient name:

Ward:

Date of birth:

Consultant:

Hospital number:

[illegible]