

OSCE

Candidate information

Your RMO has approached you with an ABG. They have intubated a 26 year old with severe asthma, and repeated the ABG after twenty minutes on the ventilator.

They discussed their plan briefly with you after the intubation, stating they were happy with permissive hypercapnia and would refer the patient to ICU. The department was busy at the time, so you have not had time to review the patient yourself. The nurse tells you the patient is currently stable. The department has settled down and you are now time-replete.

Please review the blood gas with the RMO and discuss the results.

Domain	%
Medical expertise	50
Prioritisation and decision making	30
Communication	
Teamwork and collaboration	
Leadership and management	
Health advocacy	
Scholarship and teaching	20
Professionalism	

Asthma on ventilator

Actor (RMO) information

You have intubated a 26 year old with severe asthma. At the time, you told the consultant you would aim for permissive hypercapnia but your repeat gas after twenty minutes is concerning, and you have approached your consultant to discuss it with them.

The patient is stable and the department is under control.

You have some knowledge of management of asthma, but have set the ventilator as you normally would for a standard intubated patient:

RR 14 (I:E ratio 1:2)

O2 100%

PEEP 5

TV 500ml (pt weighs 80kg)

BIPAP 10:5

You have also neglected to continue salbutamol therapy since the patient commenced ventilation.

Marking:

- Interprets ABG appropriately
- Explores reasons for gas
- Identifies inappropriate ventilator settings
- Explains settings for severe asthma
- Explains need for ongoing salbutamol on ventilator
- Trouble shoots ventilator settings (increase IPAP, mild increase EPAP)
- Offers option of going through asthma management at a later date

	Mark
Interprets ABG	2
Identifies inappropriate ventilator settings	2
Explains settings for severe asthma on ventilator	2
Explains need for ongoing salbutamol/nebs on ventilator	1
Trouble shoots ventilator settings	2
Teaches asthma management or offers to at a later date	1

ABG on 50%

pH 7.26

CO₂ 86

O₂ 52

HCO₃ 18

BE 7.1