

CODE: A8
 Question: Airway Type: Elective/Emergent Author: Dr. Brian Warriner

Opening Scenario:

You are asked to provide anaesthesia for 19 year old male with a fractured mandible secondary to a bar room brawl. The surgeon has recognized that he didn't need emergency surgery and has had the patient in hospital for 24 hours with fast for the last 8 hours. He wishes to do an open reduction of the mandible. On exam the patient is cooperative but has a nasty mandibular fracture that on X-ray is seen to pass into the left temporal-mandibular joint. The patient has had uneventful anaesthesia in the past and is otherwise well. How would you proceed?

Major points of additional information to be provided to the candidate, e.g., hx, px, labs, x-ray, consults:

The patient is able to open his mouth 2 cm before pain intervenes and prevents further voluntary opening.

If candidate opts for awake nasal-tracheal intubation, question re vasoconstriction and have candidate explain his/her approach to awake intubation in this setting.

If candidate opts for induction/paralysis, make intubation difficult because of immobility of TMJ.

30 minutes into the case peak airway pressure increases from 18 to 40 and ETTCO₂ rises. Capnography shows obstructive pattern. Candidate should describe obstructive pattern on capnograph. Passage of a catheter down the NTT is impossible. What now?

Major decision points (major decision points or options which must be recognized by the candidate)

Awake vs asleep intubation - when is it safe to anesthetize a patient with a fractured mandible?

Approach to increased peak airway pressure: evaluation of circuit, NTT, lungs, etc.

R/O pneumothorax, kinked NTT, foreign body in NTT, expiratory valve problems, etc.

Obstructed NTT: Can obstruction be overcome? Should NTT be removed? If it is removed and ventilation is possible by bag/mask, what then?

When to consider surgical airway?

Any followup information required to lead to the end of the question

Bag/mask ventilation possible. What now?

When/how to extubate after jaw wired?

Follow-up?

What if patient develops respiratory difficulty in PAR?

Critical features to be included i.e. the *must* have to pass the question or to be considered *completely unacceptable*

Must show understanding of problems associated with airway management in patients with jaw fractures.

Must have some reasonable approach to evaluation of airway and be able to make a decision about appropriate airway management

Must recognize the urgency of removing obstruction in this setting. Must have an approach to surgical airway.