Making a Mark
Question Template

Grid ItemName and Number: Cardiac 5 **Type: Emergent / Urgent / Elective**

Brief Title of Question: Atrial fibrillation in the operating room.

Objective(s) of the question:
Anesthetic considerations for patient with chronic atrial fibrillation and coronary artery disease.

Opening Scenario:
General surgeon wishes to proceed urgently with a laparoscopic cholecystectomy in a 70 year old woman with suspected ascending cholangitis. She has a 10 year history of paroxysmal atrial fibrillation with numerous pre-syncopal episodes associated with poor rate control. She was recently started on sotalol and now has only occasional palpitations. She also has stable Class 1 angina. What are your concerns and how would you assess this patient for urgent surgery?

If applicable, Critical Features for the response to Opening Scenario (i.e. Initial assessment of patient)
Consideration of control of atrial fibrillation, whether patient is anti-coagulated and stability of her coronary artery disease. Concern for sepsis and hemodynamic stability pre-op with consideration for optimization.

Major points of additional information to be provided to the candidate: Hx, Px, Labs, X-ray, consults etc.
Patient complains of severe right upper quadrant pain and fever. PMH is as mentioned with no previous anesthetics, no allergies and no other medical problem. Investigations of CAD revealed trivial LAD lesion on angiography with a normal ventricle. Meds include sotalol, metoprolol and nitro patch. Currently, BP is 100/80 with a 30 mmHg postural drop, HR 105 in atrial fibrillation with no ischemic features, Temp. is 39.0. Normal A/W, Resp and CV exam. Surgeon wishes to get to the OR as soon as possible. "How would you proceed at this point?"

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Major decision points (decision points or options which must be recognized by the candidate for the question to proceed)
1. Consideration for sepsis and volume depletion with need for volume resuscitation prior to surgery. 2. Appropriate anesthetic plan for CAD and atrial fibrillation with consideration for potential arrhythmia management. 3. Complete neurological survey to determine severity of neurological injury.

If applicable, Critical Features for the response to Major Decision Points (i.e. Problem Solving Ability or Application of Knowledge)
(Problem Solving Ability) **Ability to come up with a plan of action:** 1. Must provide appropriate assessment and optimization prior to induction. 2. Must consideration preparation for treatment of possible arrhythmia and myocardial ischemia. **Ability to prioritize conflicting problems:** **(Application of Knowledge)** **Ability to justify plan:** 1. Must produce rational anesthetic plan with concern for arrhythmia and CAD. **Ability to apply pharmacology:**

Any follow-up information required to lead to the end of the question
Induction goes smoothly, but 5 minutes after creation of pneumoperitoneum, candidate notices drop in BP to 60/40 with tachycardia of 180. Also notices 6mm ST segment elevation anteriorly. ECG reveals rapid atrial fibrillation. "What needs to be done at this point?"

If applicable, Critical Features for the response to Follow-up Information
.Must provide rapid assessment of patient and differential diagnosis for hypotension, rapid atrial fibrillation and pnuemoperitoneum. Must follow ACLS protocol for hemodynamically unstable supraventricular arrhythmia with concrete end points fr therapy.

Complexity of question				
Too simple ☐	Low complexity ☐	Moderate complexity ☐	High complexity ☐	Too complex ☐