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Clinician Narrative
Respiratory Therapy
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Mr. L is a 54 year-old gentleman with a past medical history of COPD, hypertension, anxiety, depression, hyperlipidemia and aortic stenosis who was admitted to the MGH from an OSH earlier this month for further care and management of COPD exacerbation. He had been hypoxemic with SpO2 in the 80's on room air. He was placed on BIPAP but experienced no improvement. After a few hours on BIPAP, he reportedly became obtunded with the following arterial blood gas on BIPAP 104/122/7.19. The decision was made that he needed to be intubated and transferred to the MGH. His ECG on arrival also revealed an elevation of his ST segment with evidence of an MI.

When I met Mr. L, he was on pressure support ventilation with +14 cm H2O of PEEP. During morning rounds, the plan was to wean as clinically able to eventually extubate. Attempts were made throughout the day to wean him but were unsuccessful as his oxygen saturation and his PaO2 remained low. He remained on 80 percent oxygen and pressure support of 6 cm H2O with PEEP of 14. During evening rounds, it was decided that diuretics should be administered in hopes of improving his oxygenation and weaning his PEEP overnight.

Mr. L's nurse and I reviewed the chest x-ray (CXR) and recognized we needed to advance his endotracheal tube. We explained to the patient and to Fred, the patient's brother, what we were about to do. Fred asked if we needed him to leave. Since the nurse and I were comfortable with what we were about to do, we told him that it would be fine for him to stay, but he could leave if he would be more comfortable. However we informed him that the patient may cough as we adjust the endotracheal tube. As we were in the middle of the process, he started coughing and required suctioning. Once the endotracheal tube was re-secured, the nurse left, and Fred and I were left with Mr. L. Fred asked me to explain what we had done. He wanted to know about the suctioning and his brother's overall respiratory status. He needed to know if this was to clear his lungs, which I confirmed. He then asked me how Mr. L was doing with his breathing. I explained to him that his brother was basically breathing on his own. He was initiating every breath and that the ventilator was only assisting with every breath. In fact, the ventilator was only minimally supporting him. I assured him that his brother's respiratory status was much improved in comparison to the condition in which he came to the CICU. I explained that our plan over the next day or so would be to work on improving Mr. L's oxygenation with the goal to remove the tube as soon as possible. Before going home that evening, Mr. L's brother sought me out and he asked me whether I would be at work the next day. I replied that I would be in the next day and he went home informing me that he would be back the next evening as he had to be at work in the morning. I sensed his comfort level as a result of my ability to clearly articulate his brother's situation, why the tube needed to be in and our plan for working to get it out.

The next morning, as is common, I had a new therapist on orientation working with me. During our hand-off, we were informed that the sedation had to be increased slightly overnight and Mr. L was transitioned from pressure support back to pressure control. When

I asked why he needed to be placed on pressure control, we were informed that the overnight resident was concerned about Mr. L's elevated PaCO2. The overnight resident also expressed concern over Mr. L's respiratory rate. As we started our day the orientee and I huddled for a bit. We reviewed the concerns from overnight but after assessing the data related to his respiratory status I was able to help her understand why we could still consider being more aggressive toward getting him off the ventilator. My suggestion was that we transition to pressure support as soon as possible per unit protocol. We discussed this idea with the patient's nurse. She expressed some doubt as to whether Mr. L would successfully be liberated from the ventilator. I asked her what her specific concerns were, and she replied, "Well, I think we will have to put him on *Precedex*." I then inquired as to why she feels he would need to be on *Precedex*, and therefore may not maintain an adequate respiratory rate. She told me that he was somewhat wild yesterday. She also expressed concerns that he was on a significant level of PEEP. Fortunately, I could convey my observation from the day before. When Mr. L's sedation was light he did not exhibit any signs of agitation or anxiety. In fact, he was cooperative and was pointing to his mouth and stomach. His brother at one point was able to get him to confirm that he wanted his inhalers. I let him know that he was receiving his inhalers through the ventilator. I asked Mr. L if he knew why he had a tube in mouth and was on a ventilator. He had a very perplexed look. I explained the reason for the tube and ventilator assured him that his nebulizers were being administered. Mr. L seemed relieved and more relaxed. He just needed to understand more of what was happening to him. The nurse and I were then in agreement that *Precedex* did not need to be given. I was able to demonstrate that the effect the diuretics had overnight would likely allow us to successfully wean the PEEP.

Before morning rounds, we began by steadily decreasing his FiO2. We managed to drop his FiO2 to 40% and his PaO2 remained within normal limits and began weaning the PEEP. The respiratory therapist who was with me, asked me how far we could go in weaning the PEEP. I told her that based on the fact that he was admitted with cardiogenic shock in the setting of an ST elevation MI, it would be prudent to wean the PEEP to zero before we might successfully extubate him. She and the nurse suggested that since Mr. L was a COPD patient it might be acceptable to extubate following a modified SBT. I explained how flash pulmonary edema could follow extubation since Mr. L had a myocardial infarction. The better way to assess this risk is through the normal spontaneous breathing trial. By midday, we had managed to lower the PEEP to 5. The remaining question was whether we would do a short or a somewhat extended spontaneous breathing trial. We debated whether we would do a 15 to 20 minutes trial or an SBT that would last about an hour. Thirty minutes into the trial, Mr. L was saturating well, hemodynamically stable, alert, awake, and followed commands. Mr. L was extubated around 1:30 PM and was transferred to the step-down unit the following day. Mr. L's brother was elated when he came in on Tuesday to find his brother extubated and conversant and being his jovial self.

I wrote this narrative not as an example of a dramatic rescue or specific life-saving event. As a primary respiratory therapist in the CICU, I am involved in critical events on a regular basis but something I am more proud of is my day-to-day involvement with patient care. I am presenting this narrative as an example of how my clinical expertise and collaborative relationships with the nursing and medical team affords me the opportunities to influence

clinical practice every day. In addition, my position as a well respected respiratory therapist in the CICU, allows me many opportunities to work with newer RT's not only on the respiratory care practices but on the importance of team work in caring for patients. The orientee in the narrative was afforded the chance to learn more about weaning patients, how to help influence a different approach to the care plan and to move this patient along to less invasive care as quickly as possible. My goal is that she will take this approach to her practice. Another important component of my work is my comfort level in dealing with patient families. I am able to establish a professional relationship quickly with families and my calm demeanor often helps them to achieve confidence and comfort in the care their loved one in receiving.

In this story I have tried to represent the multi-dimensional roles that I perform on a regular basis as a highly skilled respiratory therapist. I realize my expertise is beneficial to my patients, but the gratification I feel personally is even greater.

SAMPLE QUESTIONS

**Clinician-Patient/Family Relationship:**

1. You speak about Mr. L's brother Fred and allowing him to remain at the bedside as you and the nurse resecured the endotracheal tube. How do you assess if family/visitors are ok to stay at the bedside? Have you ever had a situation where this went wrong, and the patient decompensated in from of the family/visitor?

**Clinical Knowledge and Decision Making:**

1. In what areas are you a resource for information for other respiratory therapists?

**Teamwork and Collaboration:**

1. You discuss the different views of Mr. L's anxiety and need for sedation. Can you elaborate on the relationships you have with the nurses and was there any conflict in this example?