PBLD – Table #21

Oh No! – My next case is a 15 year old who needs this operation, but he's DNR

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Objectives:

- Differentiate between "informed consent" given by a competent legal adult (designated surrogate, frequently a parent/guardian) and "informed assent" given by pediatric patients (legal minors, but able to make choices regarding their own autonomy). This will include a discussion of the legal designated surrogate hierarchy for incompetent/incapacitated patients and its implications.

- Review the anesthesiologist's ethical obligation to discuss advance directives limiting the use of resuscitative procedures with the patient and/or designated surrogate prior to the induction of anesthesia. This will include a discussion of the three alternative modifications to the directive, as described by the ASA Ethical Guidelines for the Anesthesia Care of Patients with Do-Not-Resuscitate Orders or Other Directives that Limit Treatment.

- Discuss ethical implications that result from conflict between two co-equal physicians who disagree on the interpretation of whether an intervention violates the patients stated goals/values regarding temporary alterations to their advance directive. This will include a discussion of the "captain-of-the-ship" legal doctrine.

- Discuss ethical implications of physicians administering treatments/therapies against the patient's wishes, including the standards of substituted judgment and best interest.

Case History:
Billy Bob, a 15 year old male with terminal lymphoma, is scheduled semi-emergently for the surgical creation of a pericardial window to relieve increasing tamponade physiology. In the pre-op holding area, you find him sitting upright in bed looking uncomfortable, and you note that his SpO_2 is 95% on 10L non-rebreather face mask and his breathing appears somewhat labored. You introduce yourself to Billy Bob and the 2 men with him in the room as the anesthesiologist who will be caring for Billy Bob in the operating room. While Billy Bob shakes your hand and smiles weakly, one of the men tearfully states, "As his fathers, we have signed the form designating Billy Bob as DNR. He's been through so much and we don't want him to suffer any more; so, we don't want him to be intubated or resuscitated." You think Billy Bob looks sad as he shrugs his shoulders and nods his head tiredly. You shake the hand of the man who spoke, telling him that you'll talk extensively about the DNR in just a moment. He appears to relax and tells you that he's Billy Bob's dad, Cristiao. He introduces the other man to you as his husband, Tomas, Billy Bob's biological father.

Questions:

Advanced Directives-
What's the difference between a DNR and an Advanced Directive? Does a DNR place binding (legal, or ethical) limits on the delivery of medical treatments/interventions?

Informed Consent-

What constitutes an "informed consent"? What criteria are used to establish that "informed consent" has been given and obtained? What's the difference between "competence" and "capacitance"? What's a "surrogate" decision maker? Who can be legally recognized or designated as a "surrogate"? When does a legal "minor" have autonomy? What's the difference between "consent" and "assent"? What happens if the "consent" and "assent" disagree?

During the focused pre-operative assessment, you encourage Billy Bob and his dads to talk about why they've elected the DNR designation. Cristiao is adamant "that Billy Bob doesn't want to suffer any more". In fact, he admits, Billy Bob hadn't wanted the last bout of chemotherapy; however, the cancer doctors offered a new and promising drug that was only available under their research protocol. This prompted his fathers to essentially force Billy Bob to accept the new drug. After starting the treatment, Billy Bob developed SVT and was "shocked" out of it. When the fluid collection around his heart continued to grow, he was withdrawn from the study. After all of that, they feel tremendous guilt that he needs a drain to remove the fluid from around his heart in order to breathe better during his final days. They all accept that the end is near.

The circulating nurse enters the room and introduces herself as you review the DNR. You note that "no resuscitative drugs may be administered, and aggressive interventions or therapies, including intubation, mechanical ventilation, and CPR are not to be performed".

Questions:

Advanced Directives-

What are the guidelines for providing anesthesia care to patients with DNR orders or other directives that limit treatment?

You explain that during the normal course of anesthesia, "resuscitative" drugs are routinely administered to manipulate a patient's heart rate and blood pressure. In essence, it's not possible to safely administer anesthesia without using these drugs when necessary. Cristiao asks Billy Bob if it would be ok for you to treat him with these drugs, just like any other patient under anesthesia. Billy Bob nods in agreement. Tomas interjects that "the drugs are ok, but no CPR. That's more aggressive than we want to be." Acknowledging his concern, you explain that a drug administered through the IV in Billy Bob's wrist can't work unless it gets to his heart, which requires blood circulation, and sometimes the only way to circulate the blood is to perform chest compressions. Tomas looks surprised and says that "nobody's ever explained it like that before". Looking at Billy Bob, Tomas asks if CPR for this purpose would be ok with him. Billy Bob again nods, and says "but no shocks". Responding to your look of surprise, Tomas tells you that Billy Bob "was shocked out of SVT a few weeks before, and he vividly remembers the whole thing". After that, Billy Bob told his dad's, "I'd rather die than go through that again." and he insisted that both his dad's promise "to never let anyone do that to him again".

You explain that with a history of SVT, there is a higher likelihood that Billy Bob will experience SVT again, especially with the change in the geometry of his heart caused by the fluid collection surrounding it. You further explain that there are some maneuvers and medicines that may treat the SVT; however, an electrical cardioversion, or "shock" as they call it, may be (with no guarantee) the only way to stop the SVT. Billy Bob adamantly says, "No shock". You reiterate to all of them that, if the other treatments don't work, he may die from an unstable SVT. Then you look each of them in the eye and say, "Just to be clear, each one of you is telling me not to "shock" Billy Bob, even if it means that he'll die from an unstable arrhythmia, like SVT." Each one returns your stare and says "don't shock him, even if it means

that he'll die." In accordance with their wishes, you agree not to "shock" Billy Bob under any circumstance, even if that means allowing him to die.

Questions:

Advanced Directives-
What happens if your personal belief(s) preclude you from agreeing to allow a patient to die instead of treating them?

Noting the "no intubation or mechanical ventilation" provision of the DNR, you tell Billy Bob and his dads that for this procedure you do not plan to place a breathing tube; however, if the drug that he needs is oxygen, an efficient way to deliver it is through a breathing tube. Cristiao replies that they don't want Billy Bob to spend his final days on a breathing machine. You point out that placing a breathing tube does not have to be permanent. If treatment with the breathing tube is not working, it can be removed. Tomas says that a nurse told them "it's better not to start a treatment because once it's started, it can't be stopped." Based on this, they don't want to put him on a breathing machine because she told them that he'd never get off it. You agree that there is a lot of "folklore" about how it's illegal or unethical to stop a treatment once it's been started; however, the "folklore" is just that, "folklore", and explain that it's neither illegal nor unethical to stop a treatment that is inconsistent with the therapeutic goal. You suggest an alternative to them. If intubating Billy Bob is appropriate, they could agree to permit it for a pre-determined "trial period", perhaps 24 hours. In other words, the breathing tube would be removed after 24 hours because it's "no longer a necessary therapy", or it's a "futile" therapy, or it is "inconsistent with the therapeutic goals" for Billy Bob.

Trusting you, they agree to allow Billy Bob to be intubated in the OR; however, they don't ever want to return to the ICU. You explain that this would require you to remove the breathing tube before leaving the OR, which again could result in his death. They recognize this and maintain that he can only be intubated, if necessary, while he's in the OR. You agree that if it becomes necessary to intubate him, you will extubate him prior to leaving the OR, even if this results in his death.

Questions:

Advanced Directives-
What constitutes "medical futility"? Would you agree to extubate prior to leaving the OR; why or why not? Should other "airway adjuncts" be included in the "intubate or not to intubate" discussion; what about an LMA?

In the OR, Billy Bob receives a ketamine TIVA with a natural airway while Dr Kitty creates a pericardial window. As the dressing is being placed, Billy Bob's heart rate acutely increases from 88bpm to 190bpm, and you note a narrow-complex QRS on the ECG monitor. You check a NIBP which is 118/58; it had previously been stable at 145/90. You direct the anesthesia fellow to perform carotid massage while you reach for the adenosine. Following the carotid massage maneuver, the NIBP is 78/42. As you administer the adenosine, you state aloud that the patient is in SVT. Dr Kitty looks up and yells "ya gotta shock him". You remind him that Billy Bob has refused "shock" as a treatment for any arrhythmia. Dr Kitty yells "I'm captain of this ship and I demand that you shock him. He's gonna die if you don't."

Questions:

Professional Conflict-
Who's "captain-of-the-ship" in an OR? Where did this doctrine come from and is it valid?

Advanced Directives-
Is there an ethical justification for "shocking" Billy Bob again his expressed wish (best interest overriding refusal of treatment or substituted judgment)? What if Dr Kitty is devoutly religious, believing that everything that <u>can</u> be done to preserve a life <u>must</u> be done – would this make "shocking" Billy Bob against his expressed wish ethically justifiable?

Following the adenosine, a sinus rhythm is re-established at a rate of 79bpm and the NIBP reads 128/68. However, almost immediately the heart rate returns to the 190's, again with a narrow-complex QRS, and the next NIBP is not measurable. Despite your best resuscitative efforts (without administering electrical cardioversion), a perfusing rhythm is never re-established and Billy Bob dies.

Questions:

Personal Conflict-
Looking back, would Dr Kitty's appeal to the "consequence", Billy Bob's death, have provided an ethical justification to "shock" Billy Bob? Are there any other consequences that should be considered? Would the sum of these consequences together provide sufficient justification for shocking him?