Should “Do Not Resuscitate” orders be revoked prior to a patient receiving an anesthetic?
Case Studies

- 73-year-old man
- Hx: severe CAD, PVD, CVA, right hemiplegia, mild expressive aphasia
- awake and alert, presenting for right (BKA) for vascular insufficiency
- DNR order on chart- MDA discusses with pt in pre-op
- Pt does not want CPR in the OR regardless of cause or positive prognosis: pt is willing to go "so far, and no more"
- Pt agrees to subarachnoid anesthesia (spinal block) and sedation and is not intubated
- After about 20 minutes, the patient complains of weakness in his arms, and difficulty breathing. Within 3 minutes, his blood pressure and heart rate fall, and he abruptly arrests.
Background

“A DNR order is established by competent patients or appropriate surrogates to provide a mechanism for withholding specific resuscitative therapies in the event of a cardiopulmonary event.” (Margolis et al, 1995)

1976: first litigation allowing people the right to die occurred in In re Quinlan, a case where New Jersey Supreme court upheld the right of Karen Ann Quinlan’s parents to order her removal from mechanical ventilation.

1987: New York State became the first state to enact a law which stipulated that CPR would be performed unless a patient or patient’s family member formally declines it.

1991: the Patient Self-Determination Act was passed and mandated that hospitals honor an individual’s decision in their healthcare.
What happens when a patient with DNR orders undergoes surgery and requires the use of anesthesia?

~15% of patients with DNR orders undergo surgical procedures (Margolis et al, 1995) and most of the surgeries are palliative and designed to improve patient comfort and simplify care.

Anesthetics can cause cardiac and respiratory depression, placing the patient at increased risk for cardiopulmonary arrest due to the risk of the patient’s existing medical conditions.

So how does an anesthesia provider determine if the arrest is due to a primary illness, the procedure, or the anesthesia?

Does it matter?
Many therapeutic interventions involved in resuscitation are also a routine part of anesthetic management intra-operatively (intubation, mechanical ventilation, and the use of vasoactive drugs).

Who determines if the intervention falls under routine OR management or a resuscitation technique?

In the OR should these interventions always be considered a necessary part of the anesthetic?

Do anesthesia providers have the right to refuse a case if a patient refuses what is considered “normal” anesthesia management?
Options

The ambiguity of these issues has led to two main options surrounding the DNR during the perioperative period:

1. Automatic suspension of DNR orders during perioperative period,

OR

2. Collaboration with the patient and/or family to review the DNR order regarding their wishes to suspend, revise, or retain the original order during the perioperative period
Option #1

- Automatic Suspension
  - Straightforward method
  - All patients and all situations are treated the exact same way
  - Avoids potential wrongful death law suits
  - Eliminates confusion for OR personnel
  - Irrelevant if the cardiac arrest was due to the primary illness, the anesthesia, or the procedure, which is often difficult to determine, since all situations are medically managed and treated
  - Allows treatment of the side effects encountered with anesthetic administration thus supporting nonmaleficence or “do no harm”
Arguments Against Option #1: Automatic Suspension of DNR

- According to the Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment (SUPPORT) “patients with DNR orders who have a cardiac arrest in the operating room will not leave the hospital even if resuscitated” (Marolis, et al, 1995)

- Avoids the wrongful death law suit and supports nonmaleficence, it does violate the patient’s right to autonomy in their care since the Patient Self-Determination Act mandated that hospitals honor an individual’s decision in their healthcare

- Who determines when the “operative period” has ended and the DNR orders should be reinstated and who is responsible for ensuring they are reinstated?
Arguments for Option #1

- Nonmaleficence or “do no harm”
- Anesthesia frequently causes changes in the ANS such that hypotension, tachycardia, bradycardia, and temporary respiratory arrest can result. Since these side effects are a direct result of the actions of the anesthesia provider, it is their moral and ethical responsibility to provide treatment.
Collaboration with the patient/surrogate is also known as “Required reconsideration”

Some hospital institutions uphold the DNR orders to remain in effect during the perioperative period

Decision is based on informed consent with the patient or surrogate

A preoperative discussion needs to occur and include anesthesia, attending surgeon, and, if possible, the patient’s PCP

The discussion needs to be documented clearly and appropriately to help support the practitioners in the event of a litigation
Option #2 Continued

The comprehensive discussion should include:

- The risks of cardiac and/or respiratory arrest during the surgery specific to the anesthetic technique being considered

- Patient/surrogate preference for general anesthesia in the event that a planned sedation or regional anesthetic fails

- Time limitations for intubation and mechanical ventilation

- Any therapies that the patient/surrogate wants to withhold such as chest compressions, electrical countershock, intubation, mechanical ventilation, or even vasoactive drug therapy
Arguments Against Option #2

- Time constraints for a “comprehensive discussion”

- Withholding resuscitating efforts during anesthetic care violates the nonmaleficence principle of first “do no harm”

- There can be an ethical dilemma for the anesthetic practitioner

- Institutional vulnerability to litigation

- Does the patient truly understand what they are refusing?

- Confusion can occur in an emergency situation if a patient allows certain treatment but not others
Arguments for Option 2

- Up to 46% of patients with DNR orders in their charts may be unaware the order exists, even when they are competent.
- Patients do not give up their rights to self-determination at the OR doors.
- Strong and effective communication among the members of the OR is a necessity but can be accomplished.
ASA Position

- ASA disagrees with the automatic suspension of a DNR order.
- ASA recommends that prior to a procedure requiring anesthetic management, a patient’s DNR orders/advance directives should be reviewed with the patient or surrogate.
- ASA recommends that “concurrence on these issues by the primary physician (if not the surgeon of record), the surgeon and the anesthesiologist is desirable.”
ACS Position

- “The best approach is a policy of ‘required reconsideration’ of previous advance directives.”

- “The patient and physicians who will be responsible for the patient’s care should discuss new risks and the approach to potential life-threatening problems during the perioperative period”

- Surgeon will accept primary responsibility for advising patients regarding risks and benefits when discussing a potential operation

- If DNR orders are involved, it is even more important that the surgeon take a leadership role in assisting the patient and surgical team through this important aspect of surgical care
AANA Position

- “Certified Registered Nurse Anesthetists have the ethical obligation to uphold the rights of patients.”

- “Bioethical principles for decision making, including those underlying the Patient Self Determination Act, establish the patient’s right to make decisions about his or her care.”

- “The required reconsideration process supports the patient’s decisions and requires adequate time, sensitivity and respectful dialogue.”
Summary of Positions

- All three organizations, the ASA, ACS and the AANA, support and uphold the patient’s self-determination right as dictated by the Patient Self-Determination Act.
- After understanding the patient’s wishes, the conversation should be documented thoroughly in the chart.
- The family should be updated with the patient’s wishes.
- All OR personal should be informed of the plan of care.
Refusing the Case

- The ASA, ACS and AANA organizations’ position statements also include that if the practitioner (surgeon, anesthesiologist or CRNA) has an ethical dilemma with a patient’s advance directives, then that practitioner should request to transfer care to another colleague who can maintain the patient’s wishes.

- AANA specifically states: “If the CRNA is not willing to honor the patient’s choices, then the CRNA should facilitate the transfer of the patient’s anesthesia care to a colleague who can abide by the patient’s requests.”

- However, if there is no other available practitioner to assume responsibility of the case, the provider has a responsibility to participate in the procedure and adhere to the patient’s wishes, regardless of their own ethical beliefs.
Should surgery be performed on DNRs?

- Palliative surgical procedures are performed on DNR patients and are usually intended for comfort or extended care.
- Regardless of the reason for or extent of the procedure, they deserve to have input in what treatments and procedures they want in the OR.
- Patient refusal of some medical therapy, such as CPR, intubation and vasoactive drugs, does not ethically justify denying them other medical therapy, such as surgery, that might benefit them.
What about emergencies?

- Even in emergencies, medical providers still have an ethical obligation to recognize and respect patient autonomy.

- Whenever possible, we should obtain input from the patient or their appropriate surrogate, regarding the status of the patient’s DNR orders in the OR.

- Medical care in the absence of patient input should be directed toward realizing, to the best of the provider’s ability and knowledge, the patient's goals.
What about pediatric patients?

- For children, DNR orders are written when:
  1. in the judgment of the treating physician, an attempt to resuscitate the child would not benefit the child
  2. the parent or surrogate decision-maker (with the assent of an age-appropriate child) expresses his or her preference that CPR be withheld in the event that the child suffers a cardiopulmonary arrest, as long as this is in accordance with the child’s best interests

- The same principles apply with pediatric DNRs in the OR as with an adult, a comprehensive discussion should occur with the child’s surrogate or legal guardian prior to the procedure beginning

- Providers who do not feel comfortable may still request another provider take over the case, as long as one is available
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