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LETTER

Anaesthetic Management of Patients With Do-Not-Attempt Resuscitation Orders: A Case for and Against Suspension During Anaesthesia and Surgery

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Abstract

Managing patients with Do-Not-Attempt Resuscitation (DNAR) orders during anaesthesia and surgery presents an ethical dilemma: should DNAR orders be temporarily suspended or continued to allow for essential, reversible interventions? This paper examines arguments for and against suspension, emphasising the need for preoperative discussions to balance patient autonomy with perioperative safety and delivery of adequate care.

Key words: anaesthesia; surgery; Do-Not-Attempt Resuscitation; cardiac arrest

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Introduction

The management of patients with Do-Not-Attempt Resuscitation (DNAR) orders presents a unique ethical and practical dilemma in the perioperative setting. DNAR is a medical decision, made with careful consideration of patients' wishes, that avoids cardiopulmonary resuscitation (CPR) in the event of cardiac arrest, and is often applied to comorbid, or terminally ill patients where CPR is unlikely to be successful. A recent study reported to the 7th National Audit Project of the Royal College of Anaesthetists found that 3% or 67,000 adult surgical patients present to surgery with a DNAR recommendation (Nolan et al, 2024), highlighting the significance of this issue in perioperative care. Anaesthetists are tasked with respecting DNAR decisions; however, surgery and anaesthesia introduce the potential for acute, reversible physiological changes that necessitates temporary supportive interventions, raising the question of whether DNAR orders should be temporarily suspended in the operating room.

Should Patients' DNAR Be Temporarily Suspended During Anaesthesia and Surgery?

The complexity of anaesthesia and surgery inherently involves procedures that resemble resuscitation, often requiring interventions to manage cardiorespiratory

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instability (Knipe and Hardman, 2013). Perioperative DNAR orders require careful ethical consideration, as many routine operating room interventions would be considered resuscitative in other settings (Margolis et al, 1995). Recognizing this unique context, the Association of Anaesthetists recommends that suspending DNAR orders during the perioperative period is usually appropriate (Meek et al, 2022).

Perioperative cardiac arrests differ significantly from those covered by typical DNAR orders, as they are often reversible and directly linked to surgical or anaesthetic complications (Knipe and Hardman, 2013). This contrasts with the spontaneous arrests that DNAR orders typically cover (McBrien and Heyburn, 2006). The distinction becomes particularly relevant when considering survival rates: perioperative arrests show survival rates up to 92% (Olsson and Hallén, 1988), compared to just 15% in other hospital settings (Ballew, 1997). These significantly better outcomes present circumstances that may not have been considered when the original DNAR decision was made.

Given the substantial overlap between routine anaesthetic care and resuscitative procedures, strictly adhering to a DNAR order during surgery creates a paradox. Such strict adherence could result in withholding necessary and appropriate care, potentially constituting euthanasia or assisted suicide (McBrien and Heyburn, 2006). Furthermore, anaesthetists must consider their fundamental ethical obligations. The principles of beneficence and non-maleficence require them to preserve life through appropriate resuscitative measures, including CPR when indicated, in the perioperative context.

Should Patients' DNAR Be Continued During Anaesthesia and Surgery?

The central ethical issue of DNAR management involves the balance of respecting patient autonomy versus the necessity of administering life-sustaining interventions to patients while under anaesthesia. Automatically suspending Do-Not-Attempt cardiopulmonary resuscitation (DNACPR) during anaesthesia and surgery may result in unintended escalation of care and violate patient autonomy and self-determination (Nolan et al, 2024). The duration and scope of intervention is another critical consideration when continuing DNAR orders perioperatively. Interventions that address perioperative cardiac arrest and lead to return of spontaneous circulation can quickly escalate from temporary measures to prolonged mechanical ventilation, organ support and intensive care admission. The injuries sustained from CPR, whose risks are higher in frail and elderly patients—often result in poor outcomes and high mortality (Hamlyn et al, 2022).

Additionally, patients with DNAR orders often have significant comorbidities or terminal conditions that could complicate recovery from resuscitation attempts, potentially leading to a protracted dying process rather than the dignified death many patients specifically aim to achieve through their DNAR decision. These considerations support maintaining DNAR orders, particularly in cases where the surgical intervention is primarily palliative or aimed at symptom control.

Individualisation of Care and Surgical Planning

The management of DNAR orders during surgery requires careful preoperative planning and individualisation of care. Preoperative discussions with high-risk patients and their families should establish clear treatment boundaries, addressing both immediate resuscitative measures, such as CPR and subsequent care escalation, such as intensive care admission. Key considerations include the patient's current wishes, the likelihood of a successful intervention, potential complications, and anticipated postoperative care needs.

Clinical teams may choose to establish clear boundaries and responses to potential scenarios before surgery begins. For example, teams might agree to shock a shockable rhythm but not perform chest compressions, or to administer blood products for acute bleeding but limit vasopressor support for gradual hypotension. Such pragmatic approaches allow for treating readily reversible causes while respecting the patient's wishes regarding escalation of care.

The choice of surgical intervention is equally crucial, particularly for patients with incurable conditions such as metastatic cancer. The surgical approach should align with the patient's goals of care—for instance, prioritizing symptom relief over complete disease excision. Non-operative alternatives should be carefully considered when addressing symptoms that might traditionally warrant surgical intervention. These decisions require thorough communication and collaboration between the anaesthetic team, surgical team, the patient, and their next of kin to ensure alignment with the patient's wishes and values.

Conclusion

The management of DNAR orders during anaesthesia and surgery presents a complex ethical challenge, though evidence suggests that temporary suspension is likely to be beneficial given the highly reversible nature of perioperative arrests and their favourable outcomes. However, this decision should not be made unilaterally; thorough preoperative discussion with patients is essential to understand and respect their wishes, allowing for a modified DNAR status that balances the unique context of perioperative care with the patient's autonomy and original intentions. This collaborative approach ensures that life-saving interventions remain available when appropriate while staying within boundaries that respect the patient's fundamental values and preferences.

Availability of Data and Materials

Not applicable.

Author Contributions

JJW is responsible for conceptualisation, writing, and revision of the manuscript. The author contributed to important editorial changes in the manuscript. The author read and approved the final manuscript. The author has participated sufficiently in the work and agreed to be accountable for all aspects of the work.

Key Points

- Perioperative cardiac arrests differ significantly from typical in-hospital arrests, with higher survival rates and often readily reversible causes, necessitating careful consideration of DNAR status during surgery.
- While temporary suspension of DNAR orders may be appropriate to treat readily reversible causes of cardiac arrest, this can lead to unintended escalation of care and complications, particularly in frail and elderly patients where CPR-related injuries result in poor outcomes.
- Pre-operative planning should include clear agreements about specific interventions and their limits.
- Surgical intervention choices should align with the patient's overall goals of care, particularly in patients with incurable conditions, with careful consideration of non-operative alternatives.
- Successful management of DNAR orders in the perioperative period requires effective communication and collaboration between anaesthetic teams, surgical teams, patients, and their next of kin to establish clear boundaries for immediate resuscitative measures and subsequent care escalation.

Ethics Approval and Consent to Participate

Not applicable.

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Conflict of Interest

The author declares no conflict of interest.

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