

## CASE STUDY

# Do Not Resuscitate orders

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The Do Not Resuscitate (DNR) order is still not documented legal practice in India. It is a verbal communication between the clinician and the patient's relative or caregiver. The autonomy of the patient also remains a weak concept. Even the right to live a dignified life or die a dignified death has not been extensively discussed. The law is silent or ambiguous on most issues related to end-of-life care. The financial status of the patient appears to be the deciding factor. In most cases health-care expenses are entirely borne either by the patient or by the patient's relative (1).

The DNR order is a well documented and accepted concept in most developed countries. Nearly 15 per cent of patients with DNR orders have undergone surgical procedures including tracheostomy, gastrostomy, and central venous catheter insertion (2). In 1993, the American Society of Anaesthesiologists adopted guidelines for the anaesthesia care of patients with DNR orders, as well as other directives that limit care. These were subsequently updated and emphasise the importance of the autonomy of the patient and shared decision making between patients and clinicians about the limitations of treatment in the operating room (3). The Limited Aggressive Therapy Order, evolved in 2003, offers the patient the option of giving consent for cardiopulmonary resuscitation, particularly in situations in which a response has a higher rate of success, such as a witnessed cardiopulmonary arrest (4).

In India such guidelines are not followed in their entirety, or are difficult to follow when treating terminally ill patients. Guidelines were recently proposed for limiting life-prolonging interventions and providing palliative care towards the end of life in Indian intensive care units (5). However, similar guidelines are lacking in an operating room set-up where the chance of survival in "witnessed arrests" is high. We present a case which illustrates some of the ethical challenges likely to be encountered while resuscitating in the operating room.

### The case report

A 45-year-old man with hepatitis and features of hepatic encephalopathy was admitted to the department of gastroenterology and hepatology after a two-day history of disorientation, passing of blood in the stool, and generalised swelling of the body. A central venous access in the operating room was planned to administer antibiotics and monitor central venous pressure, as peripheral venous access was difficult. The attending physician made this decision after discussions with the patient's relatives. Although he was diagnosed to have

chronic hepatic failure, he was not treated as terminally ill and hence there was no discussion of DNR orders at this stage. The patient's relative was taking care of him financially.

Before being shifted to the OR the patient was clinically "sick" but haemodynamically stable, with a heart rate of 103 per minute and blood pressure of 110 /60 mm of Hg with Glasgow coma scale of 13 /15. He was shifted to the OR with administration of oxygen by mask at the rate of 5 litres per minute, with a pulse oximeter continuously measuring the arterial oxygen saturation. According to the ward nursing staff, who accompanied the patient to the OR, he had signs of life while being shifted; he was moving, but this movement affected the accurate recording of saturation. This is often the case when patients are being transferred.

When he arrived at the OR's reception desk, we noticed that he had no pulse and no signs of spontaneous respiration. Considering this to be a witnessed arrest, that is, an immediate event, external cardiac massage was started and the patient was intubated and ventilated. After intratracheal and intravenous administration of drugs and resuscitative measures for four to five minutes, he had cardiac activity and after about 20 minutes he reverted back to sinus rhythm. We established a central venous access through the right femoral vein and the radial artery was cannulated for invasive pressure monitoring during the resuscitation process. His pupillary reflexes at the end of resuscitation were found to be intact. Because of the timely intervention, the patient could be resuscitated in the controlled environment of the OR. After the resuscitation, we discussed this critical event with the concerned physician and the patient's relatives. However, the relatives were unhappy about the resuscitation and declined financial support for the resuscitation efforts as well as for further terminal care measures.

The patient was shifted to the gastroenterology High Dependent Unit (HDU) and was mechanically ventilated. After arriving at the HDU the inotropic support was withheld, following the relatives' request. The patient died after 24 hours.

### Discussion

The constraints and pertinent ethical questions in this case, we feel, are: the limited time for discussion with the patient's relatives and treating physician during an acute event in the OR; obtaining advance directives for DNR in such a case for any procedure in the OR (issues related to autonomy of the patient), who is eligible for giving consent in such a situation (issues

related to proxy consent), and who is financially responsible for the whole process, the institution or the relative?

One of the first questions to be asked in such a case is: should the patient have been resuscitated at all? This question addresses a major concern of medical ethics and law, about the patient's right to choose the form and nature of his or her medical care, including the right to informed consent or informed refusal. In our case neither the patient nor the relative had given or indicated informed refusal when the patient was taken to the OR for the procedure. In addition the patient had been haemodynamically stable until the procedure. DNR had not been discussed and was not considered till that time. Consent to high-risk (death on table) prior to taking the patient for the procedure had not been obtained. Considering all these factors, resuscitating the patient would be justified. However, the absence of high-risk consent and preliminary discussion before the procedure increases the gravity of the event and poses a major dilemma regarding resuscitation. The medicolegal implications of such an omission can be severe and this incident emphasises the point.

In a witnessed cardiac arrest, every second plays a role in determining the post-resuscitative outcome. There will always be constraints of time to discuss the patient's condition with the relatives and the concerned physicians prior to or during the resuscitation. There are guidelines for DNR orders in such scenarios in developed countries. In the absence of a DNR order it is usual practice to resuscitate the subject without losing any time in discussing the terminal condition of the patient. We followed the same strategy in our case because we aimed for a favourable outcome. As described by Mani et al (5) it is important to initiate an end-of-life discussion in these circumstances, which should guide the resuscitation team on the management plans even in witnessed arrest situations.

When the patient is not in a position to give consent, the consent given or obtained in such circumstances is called proxy consent. Ideally the patient's relative or caregiver gives proxy consent. Proxy consent involves both substantive and procedural questions (6). Ideally, a person with the most accurate and intimate knowledge of the patient's recent wishes and lifestyle should give proxy consent. S/he should have a maximum stake in the decision and should be responsible for the consequences. In this case, however, proxy consent was not possible. In developed countries people's daily needs and medical care at the end life are usually looked after by government agencies or insurance companies. This is not the case in India. Caregivers here may feel that the death of the person they care for will relieve them of a burden. This can lead to a conflict of interest arising from the treatment decision.

Another point to be noted in such cases is the term "withdrawal" or "withholding" of treatment. In this case, following the

instructions of the treating physician, inotropic support was withheld after the relative's intervention, which resulted in a deterioration of the patient's cardiovascular status and in his eventual death. The difference between withholding treatment and withdrawing treatment has ethical implications, though the final event in both cases is death.

Withdrawal of a treatment may lead to death. In such situations, it can be stated that the patient's death was directly related to the withdrawal of the treatment. On the other hand when the treatment is withheld, it seems natural that the patient died of the disease. This is important because the practitioner may be relieved of a sense of guilt when the treatment is withheld rather than feel guilt when the treatment is deliberately withdrawn.

In our case, the treating physicians called it withholding of the treatment because they did not continue to add to the inotropes once the infusions got over. Thus inotropic support was withheld. However it can be argued that as inotropic support was already started in the OR, its discontinuation in the HDU amounted to withdrawal rather than withholding of treatment. Such terminology is relevant when finalising guidelines.

## Conclusion

What emerges from this discussion is the deficiency in applying ethical concepts and principles of decision making to terminally-ill patients in operating rooms in India. Clear guidelines for the care of terminally-ill patients in the operating room need to be drafted, keeping in mind the financial and emotional burdens to the family. The medical community, particularly critical care physicians, must work towards evolving legislation appropriate to the Indian scenario.

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## References

1. Mani RK. Limitation of life support in the ICU: ethical issues relating to end of life care. *Indian J Crit Care Med* 2003; 7: 112-7.
2. Truog RD. "Do-not-resuscitate" orders during anaesthesia and surgery. *Anaesthesiology* 1991; 74: 606-8.
3. Jackson SH, Van Norman GA. Goals- and values-directed approach to informed consent in the "DNR" patient presenting for surgery: more demanding of the anaesthesiologist? *Anaesthesiology* 1999; 90: 3-6.
4. Choudhry NK, Choudhry S, Singer PA. CPR for patients labelled DNR: the role of the limited aggressive therapy order. *Ann Intern Med* 2003; 138: 65-8.
5. Mani RK, Amin P, Chawla R, Divatia JV, Kapadia F, Khilnani P, et al. Limiting life-prolonging interventions and providing palliative care towards the end of life in Indian intensive care units. *Indian J Crit Care Med* 2005; 9: 96-107.
6. Freedman B. On the rights of the voiceless. *J Med Philos* 1978; 3: 196-210.