



# Ethical and Legal Issues in Donation After Cardiac Death in Italy

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## ABSTRACT

In Italy death of a human being must be declared either after brain death or after 20 minutes of cardiac arrest, certified by continuous electrocardiography (EKG) recording.

It is my personal opinion that in such circumstances after cardiac death (DCD) will allow at best only the retrieval of few marginal kidneys and some tissues, and therefore will not be very helpful for our waiting list patients. I suggest instead modifying first the Italian law in order to be able to declare cardiac death after only 5 minutes of cardiac arrest, certified by continuous EKG recording.

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**I**N ITALY, death of a human being must be declared either after brain death or 20 minutes after cardiac arrest as certified using continuous electrocardiography (ECG). In Italy, active or passive euthanasia is a crime. No law concerning a living will has been approved yet. Therefore, Maastricht category III (awaiting cardiac death), or “controlled” donation, after cardiac death is not possible. In the 1960s, when organ transplantation was first performed in Italy, kidneys for transplantation were removed from donors with cardiac death or from non-heart-beating donors. However, this kind of procedure was discontinued after the Italian Parliament approved the “brain death” law.<sup>1–7</sup>

Recently, donation after cardiac death has been proposed again by some Italian transplant centers for Maastricht category II (unsuccessful resuscitation) or V (cardiac arrest after brainstem death), or “uncontrolled,” donation from non-heart-beating donors. There is partial agreement among some experts in legal medicine and some judges that cannulation of the femoral vessels can be performed without previous family consent in patients who sustain a cardiac arrest after timely and effective attempt at cardiopulmonary resuscitation. Drugs of no use to the patient are not allowed.

After obtaining consent of relatives, it is required that resuscitation be stopped and to wait at least 20 minutes for cardiac arrest as certified using continuous ECG. Only then is it possible to initiate cold perfusion and perhaps cardiopulmonary bypass, and to move the patient to the operating room for organ harvesting.

In Italy, a presumed consent law has been approved but not enforced, primarily because of lack of data about public opinion. I believe it is risky to perform postmortem cannulation of the femoral vessels in a potential donor unless he

or she has a donor card or there is certain proof of willingness to donate organs and tissues.

The Netherlands, France, and Spain do not have these issues. In contrast, the United Kingdom has not yet approved a presumed consent law; however, the Human Tissue Act passed in 2004 included an additional clause that it is acceptable to take “minimum steps” to preserve the option of donation.<sup>8</sup>

In my opinion, this procedure will enable, at best, retrieval of only a few marginal kidneys and some tissues. Therefore, it will not be helpful for patients on waiting lists. I suggest instead to first modify Italian law to enable declaration of cardiac death after only 5 minutes of cardiac arrest as certified using continuous ECG.

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