Donation after Circulatory Determination of Death: Ethical Tensions

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DCDD: Ethical Tensions

The decision to withdraw life sustaining treatment	VS	The decision to donate organs
Optimizing the quality of the dying process	VS	Optimizing the quality and quantity of the donated organs
Obligations to provide balanced informed consent	VS	Belief that we should promote organ donation
Belief that we need to follow the “dead donor rule”	VS	Protecting and fully respecting the donor’s wishes

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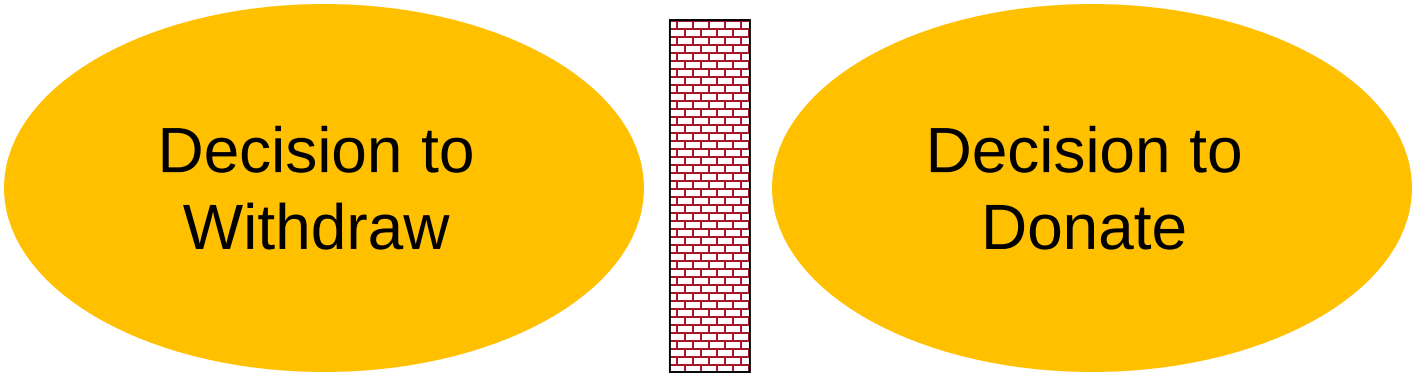
Whether and when to withdraw?



Whether and when to withdraw?

"It seems inevitable that the fact that someone else is waiting for this patient's kidney must to some extent influence the decision [whether to withdraw life support], since the longer the injured patient is connected to the machines the more his kidneys and other vital organs are likely to deteriorate."

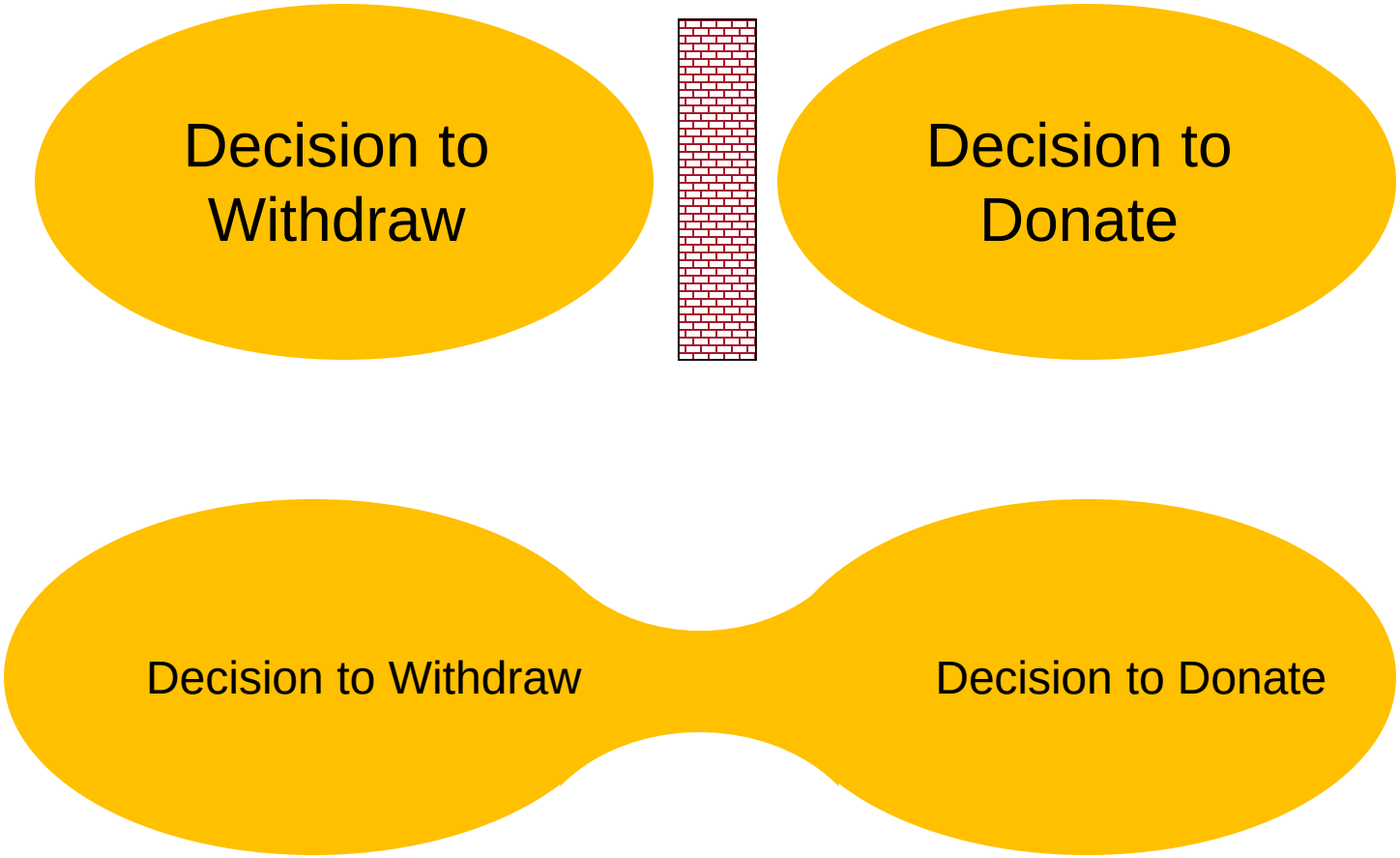
Woodruff MF. Ethical problems in organ transplantation. Br Med J 1964; 1(5396):1457-1460.

Whether and when to withdraw?

- Maximize prognostic certainty →
  Delay decision to withdraw

- Maximize transplantation potential →
  Accelerate decision to withdraw

Whether and when to withdraw?



Whether and when to withdraw?

Should we have a rule that families be informed about DCD only after the decision to withdraw life support has been made?

- Naïve? As DCD becomes better known, more families will be aware of it
- Unfair? We don't usually rely on the "ignorance" of families about medical options to ensure good decision-making

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Quality of End-of-Life Care

- Transport from ICU to OR
- Life support withdrawn in the OR
- Premortem interventions
  - Invasive catheters
  - Medications to preserve organs
  - Continuous monitoring of pulse and cardiac function
- Sedation and analgesia
  - Pressures to give “too much”
  - Pressures to give “too little”
- Abrupt separation from family at asystole
- Return to ICU if asystole does not occur in 1 hr

Procedures to benefit organs

- Early principle: No non-beneficial medical interventions should be allowed before death
  - Surrogates may not consent for non-beneficial procedures
  - But some are deemed essential, such as heparin administration
- Trend is toward more medical interventions
  - Many protocols permit placement of pre-mortem CVLs
  - New protocols include use of ECMO

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Whether to be an organ donor?

- What is the goal of counseling families?
  - ❑ To maximize organ donation rates?
  - ❑ To help families make the decision that's right for them, all things considered?

Counseling Families: The "Presumptive" Approach

Standard Approach	Presumptive Approach
"This is Mary. She works with families like yours who have lost a loved one. Would it be possible for her to speak with you for a moment?"	"Mary is a member of our team. . . . She is going to speak with you and answer any questions you might have."
"I'm here to provide you with information about organ donation."	"I'm here to provide you the opportunity to donate your loved one's organs."

Zink S, Wertlieb S. Crit Care Nurse 2006; 26:129-136.

Counseling Families: The "Presumptive" Approach

Standard Approach	Presumptive Approach
"Some families choose the option of donating their loved one's organs. I am here to help you make the decision that is best for you and your family."	"You and your husband now have the opportunity to make your son a hero through the gift of organ donation."
"We will support whatever choice you make."	"Most people, if given the chance to save a life, will do it."

Zink S, Wertlieb S. Crit Care Nurse 2006; 26:129-136.

Counseling Families: The "Presumptive" Approach

Standard Approach	Presumptive Approach
"If you decide to donate…"	"When you decide to donate…"
"Would you like me to give you some time before you make your final decision?"	"If you do not have any more questions, I will now guide you through this process."

Zink S, Wertlieb S. Crit Care Nurse 2006; 26:129-136.

Informed consent for DCD

- Can we assume that patients who have authorized organ donation on a driver's license have consented to DCD?
- Not clear that surrogates have authority to provide consent for nonbeneficial pre-morbid procedures
- Informed consent for pre-mortem procedures is usually obtained by the OPO rep, not the patient's physician

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The dead donor rule

The removal of vital organs must not be the cause of the patient's death

un

Nothing is more certain than death –

Seneca

Determining Death in DCD (1)

- Is cardiac transplantation following DCD oxymoronic?
  - If a heart procured from a donor on the basis of the “irreversible” loss of circulatory function is transplanted and functions in the chest of another patient, how could the loss of function have been irreversible?

Determining Death in DCD (2)

- US Law defines death as the irreversible cessation of circulatory and respiratory functions

- Common experience indicates that at least some patients can be successfully resuscitated after 5 minutes of pulselessness

Determining Death in DCD (2)

- Some argue that "irreversible" means
  - "*choose not to reverse*" rather than
  - "*cannot reverse*"
- All of these patients have DNR status
  - If their heart does not auto-resuscitate, then pulselessness will become irreversible
- Are we mistaking a prognosis (dying) with a diagnosis (death)?

Determining Death in DCD (3)

- How long do we need to wait to be sure a patient will not autoresuscitate?
  - Range of 75 sec - 10 min, usually 5 min
- "In the absence of cardiopulmonary resuscitation… autoresuscitation has not been reported" Hornby K, Hornby L, Shemie SD. Crit Care Med 2010;38:1246.
- We have no data to suggest a lower limit to the "hands-off" period

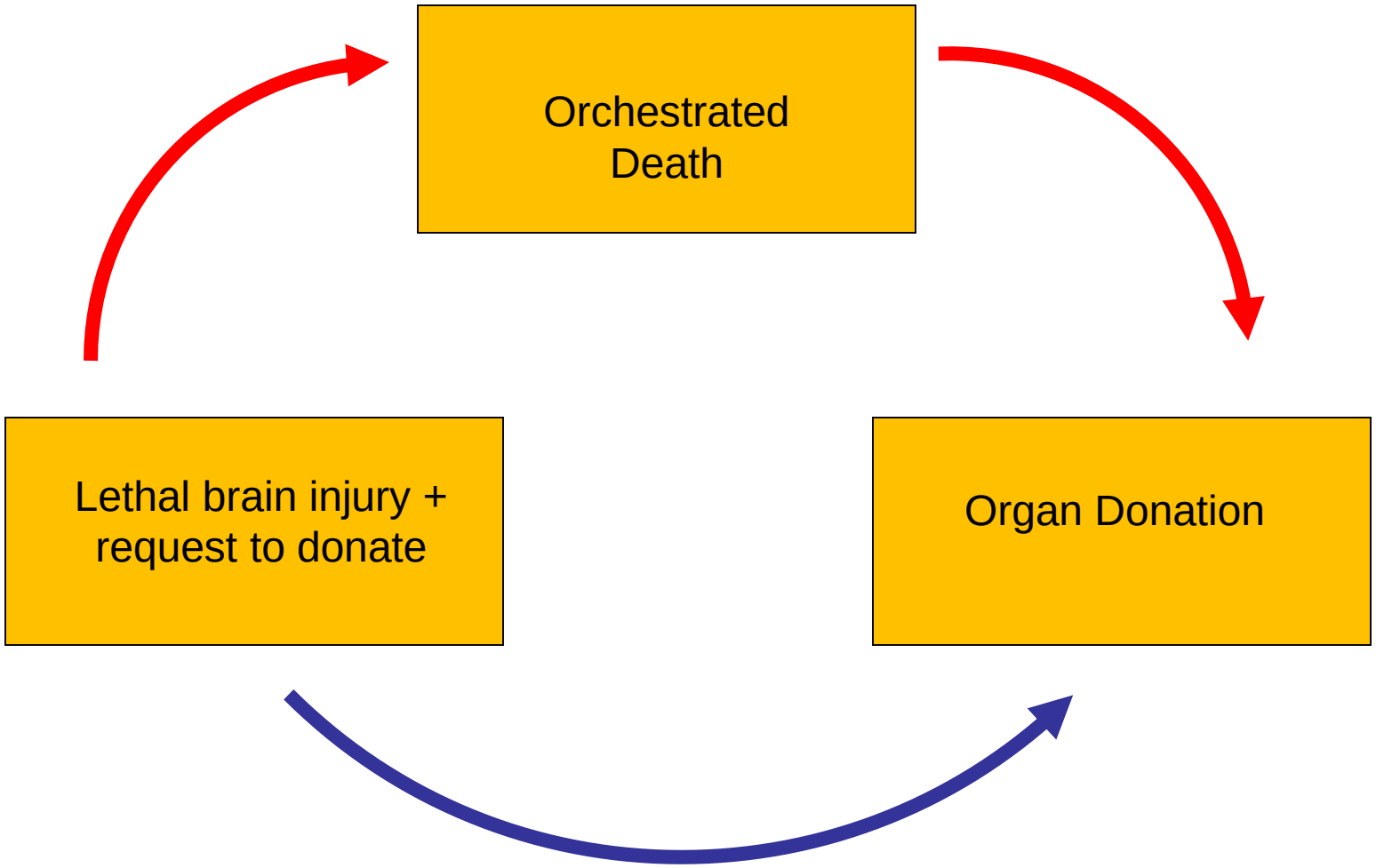
Determining Death in DCD (4)

- If death is really “all about the brain” then why do we care about autoresuscitation?
- The important question is: “How long does a patient need to be pulseless for us to be sure they are brain dead?”
- Studies in humans not possible
- Studies in pigs
  - Some pigs resuscitated 5-10 min after arrest recovered brainstem reflexes
  - Authors suggest a 10 min “no touch” time

Stiegler P, et al. Transplant international, 2012;25:481.

Determining Death in DCD (5)

- Why are we obsessed with knowing whether or not the donors are dead?
- What should really matter:
  - Saving the most lives as is ethically possible
  - Protecting and respecting the organ donor
  - Maintaining the trust and confidence of the public
- The Dead Donor Rule is largely irrelevant to these central concerns


Orchestrated Death
Organ Donation
Lethal brain injury + request to donate

Protecting and respecting the donor

- Sarah is a 40 year-old woman who suffers from advanced ALS and who is now completely ventilator dependent
- After long deliberation, she asks that her ventilator be disconnected, and that she be allowed to die
- She would like to be an organ donor
- She would like to donate as many organs as possible, in the best condition possible
- She requests that her organs be procured under anesthesia as part of ventilator withdrawal

Protecting and respecting the donor

- Would orchestrating Sarah's death to allow her to donate the most and best organs and save the most lives in the process of dying be wrong?

- Is it wrong to deny her this request?

Parental views on the DDR

Her parents said that had they not been able to donate Addison's heart, it would have been "like another slap in our faces." They would have permitted simply taking out Addison's heart under general anesthesia – without the choreographed death.

Sanghavi D. N Y Times Magazine 12/20/2009

“Paul has some difficulty understanding why, if Jaiden was going to die anyway, she could not have been put under general anesthesia, undergone surgery to donate her organs, and then been declared dead.”

“There was no chance at all that our daughter was going to survive… I can follow the ethicist’s argument, but it seems totally ludicrous.”

Sanghavi D. N Y Times Magazine 12/20/2009

But – in the near future none of this may matter at all!

BIOMEDICINE

Xenotransplant advances may prompt human trials

Record survival of primates with pig organs raises hopes