Substitution: fact or fiction
What potential DCD could be DBD donors

sub·sti·tu·tion: The action of replacing someone or something with another person or thing.

Synonyms: replacement - change - commutation - exchange

Dr Dale Gardiner
Deputy N-CLOD
www.clodlog.com
## Potential for DBD

<table>
<thead>
<tr>
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<th>Potential DBD pool</th>
<th>Actual DBD donors</th>
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<tr>
<td>Spain</td>
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per million population, 2010

How can the incidence of brain death and DBD vary so much?
Potential for DBD

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per million population, 2010

Does treatment limitation or withdrawal account for these differences?

- Different standards for neurological determination of death (worrying)
- Lower incidence of brain injury (complacent)
- Better outcomes from treatment (arrogant)
- Different approach to the end of life care in patients with catastrophic brain injury (intriguing)

April 2014
**Ethicus study**

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End-of-Life Practices in European Intensive Care Units
## Ethicus study

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End-of-Life Practices in European Intensive Care Units
Decisions to limit or withdraw treatments lessen the potential for donation after brain-stem death, but may promote donation after circulatory death.
Substitution of DCD for DBD is a

FACT or FICTION
failed to BSD test

my local experience

timings

attitudes

April 2014
FACT?

Emergency

time

Blood and Transplant

April 2014
2012 / 13 NHSBT data
‘admission to consent’ median time

April 2014
failed to BSD test

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April 2014
Potential Donor Audit: patients <76 years in non-cardiothoracic intensive-care units in the UK from April 2004 to March 2009 (n=78,338)

Is the increase in DCD organ donors in the UK contributing to a decline in DBD donors? (Summers et al. Transplantation 2010)

April 2014
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1. Number of patients who could possibly be tested for brain-death fallen
2. Proportion of patients actually tested for brain-stem death increased
3. Overall conversion rates increased
4. No evidence that a change in management of dying patients has led to large scale conversion of potential DBD donors into DCD donors
Evaluation into ‘failed’ Brainstem death testing in the Midlands (2012)

Criteria for neurological testing met 209

Neurological tests to confirm death performed 162 (78%)
Neurological tests to confirm death NOT performed 47 (22%)

Debatable miss for neurological testing 2

TRUE MISS for neurological testing 28

Potential for Organ Donation?
- Yes 23 (49% of non-tested)
- No 3

Debatable 2

NOT a TRUE MISS for neurological testing 16

Potential for Organ Donation?
- Yes 0
- No 16

Reasons reviewers felt clinicians hadn’t tested

Testing only if family first agreed to organ donation 12
Haemodynamic instability not supported 5
Not medically suitable for donation 5
Testing not considered 4
Continuing effects of sedation 1
Haemodynamic instability not fully supported 1

Wrongly classified as criteria for neurological testing met 1

Haemodynamic instability despite full treatment 11
Neonate < 2 months 2
Respiratory instability - unable to perform apnoea test 2
Not medically suitable for donation 1
47 not tested (22%)
47 not tested (22%) = 0
2013-14
60 patients analysed of planned 100:
x2 neuro-intensivists, neurosurgeon, SN-OD and liver transplant surgeon

2
Confirmed brain dead and family requested DCD

38
No chance of progression to brain death

8
May have been testable

12
May have been testable in 36 hours

3 # C-Spine (1 angio inconclusive, 2 no angio facility)
4 coned while awaiting retrieval (3 consultants unwilling to test, 1 family refused to wait for test)
1 Disagreement between the 2 testing physicians as to satisfactory preconditions

FICTION
failed to BSD test

timings

my local experience

clock

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April 2014
Attitudes to organ donation by ICU staff?
Attitudes to organ donation by ICU staff?

- **DONATION AFTER BRAIN DEATH**
  - Positive Words: 40
  - Negative Words: 10

- **DONATION AFTER CIRCULATORY DEATH**
  - Positive Words: 20
  - Negative Words: 80

*2011 workshop involving one hundred and eight critical care staff*
failed to BSD test

my local experience

timings

attitudes
Gardiner D, Riley B

2013

34

42

61

consented DCD donors
failed to BSD test

my local experience

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April 2014
Substitution of DCD for DBD is a

FICTION

Offering more choice to families…
Slowing down the rush to withdraw / brain stem death test…

FACT or FICTION?