ETHICAL ISSUES IN TRANSPLANTATION; WHAT IS THE STATUS OF DONATION AFTER CARDIO-CIRCULATORY DEATH IN ALBERTA?

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A Very Quick Overview…
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• Types of transplant
  – Living donor (LR, LUR)
  – Cadaveric
    • NDD (brain dead)
    • DCD (cardio-circulatory death)
Harvard Ad Hoc Committee 1968

A Very Quick Overview…

• 1950: First successful kidney transplant by Dr. Richard H. Lawler (Chicago, U.S.A.)\(^{[13]}\)
• 1954: First living related kidney transplant (identical twins) (U.S.A.)\(^{[14]}\)
• 1955: First heart valve allograft into descending aorta (Canada)
• 1962: First kidney transplant from a deceased donor (U.S.A.)
A Very Quick Overview…

• 1965: **Australia**'s first successful (living) kidney transplant (**Queen Elizabeth Hospital, SA**, Australia)
• 1967: First successful liver transplant by **Thomas Starzl** (Denver, U.S.A.)
• 1967: First successful heart transplant by **Christian Barnard** (Cape Town, South Africa)
• 1981: First successful heart/lung transplant by **Bruce Reitz** (Stanford, U.S.A.)
## Maastricht classification

<table>
<thead>
<tr>
<th>Category</th>
<th>Type</th>
<th>Circumstances</th>
<th>Typical location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Uncontrolled</td>
<td>Dead on arrival</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>2</td>
<td>Uncontrolled</td>
<td>Unsuccessful resuscitation</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>3</td>
<td>Controlled</td>
<td>Cardiac arrest follows planned withdrawal of life sustaining treatments</td>
<td>Intensive Care Unit</td>
</tr>
<tr>
<td>4</td>
<td>Either</td>
<td>Cardiac arrest in a patient who is brain dead</td>
<td>Intensive Care Unit</td>
</tr>
</tbody>
</table>
Numbers in Canada

From 2012 Canadian Institute for Health Information

NDD - 1230
DCD - 164
LR - 325
LUR - 134
LDPE - 25
Numbers in Canada

From 2012 Canadian Institute for Health Information
DCD by province:

- Alberta - 3
- BC - 31
- Ontario - 130
# Current DCD Numbers

<table>
<thead>
<tr>
<th>Year</th>
<th>DCD Referrals</th>
<th>DCD Accepted</th>
<th>Organs Transplanted</th>
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</thead>
<tbody>
<tr>
<td>2007</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2008</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>2009</td>
<td>3</td>
<td>1</td>
<td>Pancreas 2 kidneys</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Liver 2 kidneys</td>
</tr>
<tr>
<td>2010</td>
<td>7</td>
<td>1</td>
<td>2 kidneys One double lung</td>
</tr>
<tr>
<td>2011</td>
<td>13</td>
<td>3</td>
<td>2 kidneys</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>One double lung</td>
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<tr>
<td>2012</td>
<td>7</td>
<td>1</td>
<td>2 kidneys</td>
</tr>
<tr>
<td>2013</td>
<td>9</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Ethical Issues

- Philosophical Concerns
- Practical Concerns
Philosophical Concerns

• The Dead Donor Rule (is it circular?)
Philosophical Concerns

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• Not “really” dead (essentialism problem, irreversibility, etc.)
Philosophical Concerns

- The Dead Donor Rule
- Not “really” dead (essentialism problem, reversibility, etc.)
- Conceptual honesty and transparency
Philosophical Concerns

Two proposed solutions to addressing the philosophical concerns:

1) abandon the dead donor rule.

2) understand the declaration of death correctly as a convention, i.e. the consensus of an expert community for a particular purpose.
19th Century New York Bill

• **First** – Permanent cessation of respiration and circulation.

• **Second** – Purple discoloration of the dependent parts of the body.

• **Third** – Appearance of blistering around a part of the skin touched with a red hot iron.

• **Fourth** – The characteristic stiffness known as rigor mortis.

• **Fifth** – Signs of decomposition
Practical Concerns
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- conflict of interest (real or perceived)
  - fiduciary obligation (particularly ICU staff)
Practical Concerns

• conflict of interest (real or perceived)
  – fiduciary obligation
  – process management
Practical Concerns

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  - perimortem procedures to facilitate transplant (heparin, cannulation, etc.)
Practical Concerns

• conflict of interest (real or perceived)
  – fiduciary obligation
  – process management
  – perimortem procedures to facilitate transplant (heparin, cannulation, etc.)
  – conflicts between pts/families in small centres/small pt. populations.
Practical Concerns

• The devil is in the details
Practical Concerns

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- Service with greatest vulnerability must control the process (ICU).
Practical Concerns

• The devil is in the details
• Service with greatest vulnerability must control the process (ICU).
• Staff must feel supported both by clear policy and rational regarding process, but also to conscientiously withdraw from the process. The process must be transparent.
Some Last Thoughts

- Understand transplant as a necessary transitional technology.
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• Understand the fundamental communal values that make transplant possible, i.e. trust, compassion.
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• Understand the fundamental communal values that make transplant possible, i.e. trust, compassion.
• Identify the unique elements that both define and enable transplant and recognize conventions that serve and are limited by this community.
Some Last Thoughts

• Understand transplant as a necessary transitional technology.
• Understand the fundamental communal values that make transplant possible, i.e. trust, compassion.
• Identify the unique elements that both define and enable transplant and recognize conventions that serve and are limited by this community. (pay to play?)
• Mitigate the conflict of interest faced by ICU staff by removing the burden of identification/selection of donors and addressing donation at a more appropriate time.
Thanks, and please feel free to contact me!

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