Surgical Options for End-Stage Heart Disease

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Louis Washkansky  (December 12th 1967)
Figure 10  Survival for adult heart transplants performed between January 1982 and June 2008, stratified by era of transplant. NA, not available.
Heart Transplant Need

Evans RW. In: Rose/Stevenson 1998;13
Primag and proper teacher’s transplant shocker!

My new heart turned me into a beer-guzzling clod

A lady schoolteacher says the man’s heart she got in a transplant operation has turned her into a beer-chugging, cigar-smoking, pro wrestling fanatic, European newspapers report.

“They might as well have given me a sex change,” Christine Laurent, 45, told reporters from her home in Avignon, France.

“Before the operation I was a refined woman, with a woman’s interests and a woman’s desires. Now I’m not happy with a good back and a glass of wine.

“I’m not satisfied unless I have a beer in my hand, a cigar in my mouth and professional wrestling on TV. I’m not saying I’m not grateful to be alive.

“But my husband is threatening to divorce me — he says this new heart has turned me into a clod.

“Chad isn’t the word for it,” named Andre Laurent, her husband of 21 years. She stinks up the house with those goofy movies and sports, beer...

Docs give her a man’s heart — now she puffs stogies and rants and raves at TV wrestlers

Cops can’t make drunks say ABCs

Cops will have to read signs drivers their rights before having them read the alphabet during roadside sobriety tests, according to a weedy new court ruling.

A Pennsylvania court of appeals ruled that officers may require drivers to perform physical tasks such as walking in a straight line without advising them of their constitutional rights.

But the court said Miranda warnings are necessary before “testimonial evidence” including reciting the alphabet.

A woman has been a different person since her operation last December.

But he called the changes a typical and transient psychological response in the transplant, nothing more, nothing less.

“A man’s heart can be disease-free and perfectly normal, he said.

“It’s not at all uncommon for these patients to suffer identity crises after their operations,” he said.

These crises are usually fleeting, however, and I’m sure she’ll come around in time.
Types of Ventricular Assist Devices - VADs
Mechanical Circulatory Assistance

- Short term devices
  - IABP
  - Adult ECMO
  - Percutaneous LVAD (TandemHeart)
  - Abiomed LVAD, RVAD, BiVAD
  - Centrimag
Implantable VADs
Pulsatile vs. Non-pulsatile
Ventricular Assist Devices

- Left ventricular assist device (LVAD)
- Right ventricular assist device (RVAD)
- Bi-ventricular assist device (BiVAD)
Type of VAD: patient’s status and length of support

- **Patient**
  - Profound shock
    - End organ failure
    - Cardiac Arrest
    - RHF
  - Decompensating CHF
    - transplant candidate
  - Not transplant candidate
    - Nontransplant center
    - Recoverable LV
  - Destination Therapy
    - not transplant candidate

- **Device**
  - Abiomed
  - Thoratec
  - TAH
  - TCI
  - Novacor
  - Centrifugal
  - TAH
  - Thoratec
  - Novacor

- **Purpose**
  - Need early excellent support to avoid end organ damage
  - Hospital discharge possible
  - RHF treatment mandatory
  - Wean within five days
  - Permanent
Current Role of VADs

- Bridge to transplantation
- Destination therapy
- Bridge to candidacy
- Bridge to recovery
- Backup for high risk reparative surgery
- Bridge to transplantation
- Destination therapy
- Bridge to candidacy
- Bridge to recovery
- Backup for high risk reparative surgery
<table>
<thead>
<tr>
<th>group</th>
<th>30-day (95% CI)</th>
<th>1-year (95% CI)</th>
<th>2-year (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early (90-96)</td>
<td>84% (72-96%)</td>
<td>62% (47-72%)</td>
<td>49% (33-65%)</td>
</tr>
<tr>
<td>Mid (97-7/03)</td>
<td>71% (55-87%)</td>
<td>52% (34-69%)</td>
<td>42% (25-59%)</td>
</tr>
<tr>
<td>Late (8/03-8/06)</td>
<td>100%</td>
<td>86% (66-99%)</td>
<td>81% (65-97%)</td>
</tr>
</tbody>
</table>

**Graph:**
- **Survival (%)**
- **MONTHS**
  - University of Wisconsin
  - All Other Centers
- Bridge to transplantation
- **Destination therapy**
- Bridge to candidacy
- Bridge to recovery
- Backup for high risk reparative surgery

“Well, lemme think... You’ve stumped me, son. Most folks only wanna know how to go the other way.”
Evans RW. In: Rose/Stevenson 1998;13
Overall Survival

June 2006 – September 2010
Adult Primary Implants, Destination Therapy: n=385

% Survival

Month | % Survival
--- | ---
3 mo | 85%
6 mo | 76%
12 mo | 67%
24 mo | 46%

Deaths/Month (Hazard)

Event: Death (censored at transplant or explant recovery)

Pts at risk: 385 250 148 78 56 42 28 24 17

n=385, deaths=97
- Bridge to transplantation
- Destination therapy
- Bridge to candidacy
- Bridge to recovery
- Backup for high risk reparative surgery
Exclusion Criteria

Compliance problems

- Substance abuse
- Untreated psychiatric dz.

Perioperative risk factors

- Active peptic ulcer disease
- Morbid obesity/ cachexia
- Pulmonary embolus (<6wks)
- PVR > 6 WU
- Bridge to transplantation
- Destination therapy
- Bridge to candidacy
- Bridge to recovery
- Backup for high risk reparative surgery
Left Ventricular Assist Device and Drug Therapy for the Reversal of Heart Failure

- Bridge to transplantation
- Destination therapy
- Bridge to candidacy
- Bridge to recovery
- Backup for high risk reparative surgery
Tandem Heart
External Support
SLMANA EAST
CHARITY BALL
ANNUAL GENERAL MEETING
&
SCIENTIFIC SESSIONS
ON
NOVEMBER 12TH, 2011

NEW YORK HILTON AND TOWERS
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