Cardiac Transplantation and Total Artificial Hearts: The First Clinical Cases

Highlighting Medical and Ethical Complexities of Spare Parts Surgery

ACS module in the history of surgery
Dr Norman Shumway

Dr Richard Lower
Dr Christiaan Barnard performs first human heart transplant on patient Louis Washkansky, South Africa, 3 Dec 1967
Artificial Heart Implant, 4 April 1969
Artificial Heart Implant, 4 April 1969
An Artificial Heart Scores a Breakthrough and Starts a Squabble

WASHINGTON — For more than 3½ days a human being lived without a heart.

Inside his chest was a pump made of plastic and other materials, which operated to keep the blood flowing. The surgeons and colleagues who performed the operation knew that the artificial heart was unlikely to last longer than two days.

But they also knew that this was the only chance they had to save the patient's life.

The patient was Haskel Karp, 47, who was on the operating table while the surgical team tried to repair his damaged heart. The team used a mechanical device that had been approved by the U.S. Food and Drug Administration.

The operation was performed by Dr. Denton A. Cooley, who actually used the artificial heart. Cooley is the founder of the Texas Heart Institute and has performed more than 1,000 heart transplants.

The artificial heart was a device designed by Dr. Dominico A. Cooley, right, a device Dr. Cooley, the first time in surgical history, implanted in the chest of a patient April 1. The patient was kept alive for a total of 45 days.

In the meantime, Cooley was receiving federal support in related work being done under another program.

Dr. Cooley Will Continue to Use the Artificial Heart; Baylor Seeks Limitations

Dr. Cooley Will Continue to Use the Artificial Heart; Baylor Seeks Limitations

WACHTSKY, May 17 (AP) — Dr. Denton A. Cooley said today that he would continue to use artificial hearts in transplants because he believes it is necessary, despite attempts by the Baylor College of Medicine in Houston to limit the use of the synthetic heart.

"I will use it," Dr. Cooley said. "I will use it if it is necessary and if it is approved by the Food and Drug Administration." The medical college's executive committee was meeting today (Thursday) to reconsider its decision that it could not have the device.

The medical college's chairman, of the Texas Heart Institute, which is co-sponsored with Dr. Cooley, the first time in surgical history, will operate on the first patient April 1. The patient was kept alive for a total of 45 days.

Dr. Cooley said that he would use the device for patients who are in critical condition and who have a chance of survival.

Dr. Cooley was receiving federal support in related work being done under another program.

Dr. Cooley Defends His Use of Artificial Heart to Save Patient

BAYLOR, April 26 (AP) — Dr. Denton A. Cooley, the heart surgeon, filed today an answer to a $4.5 million suit instituted by the widow of the world's first artificial heart recipient, Haskel Karp.

In the answer, Dr. Cooley denied any wrongdoing.

Mrs. Shirley Karp, 46 years old, of Skokie, Ill., filed the suit against Dr. Cooley; Dr. Dominico A. Cooley, who assisted Dr. Cooley; San Calvin, an engineer who worked on the artificial heart implanted in Mr. Karp, and St. Luke's Episcopal Hospital, where the operation was performed in 1969.
# Early Heart Transplant Operations

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<td>Barnard (Capetown)</td>
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<td>Cooley (Houston)</td>
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<td>Kantrowitz (NY)</td>
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Barnard - Kantrowitz - Shumway ... and others ...
Table I. Human heart transplant information—March, 1970

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<th>World totals (20 countries)</th>
<th>United States</th>
<th>Other</th>
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<td>Transplant teams</td>
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<td>24</td>
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<tr>
<td>Transplants</td>
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<td>Surviving more than 1 year</td>
<td>13</td>
<td>8</td>
<td>5</td>
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* Note spelling errors: Dr Norman Shumway; Dr Denton Cooley