

heart notes

In the wake of the spate of heart transplants came these related developments:

MOSCOW

Soviets Won't Perform Heart Transplants

After comments supporting and criticizing heart transplantation had come from Russian doctors, the Soviet Government has let it be known that such procedures will not be permitted in the Soviet Union.

Health Minister Boris Petrovsky, in a Moscow lecture reported by the official Soviet news agency Tass, criticized the five heart transplants that have taken place in South Africa and the United States.

Petrovsky says the problem of the body's immunological response to the foreign organ, whereby the organ tends to be rejected, has not been solved. He says that for the present Russian surgeons will not be allowed to perform such transplants. Previously two Soviet physicians, Drs. Yuri Lophukin and Rem Petrov, criticized the transplants as premature. But Dr. Yosef Chertkov was quoted as hailing the transplant work as a "huge success."

WASHINGTON

Calf Hearts Considered For Humans

The hearts of calves may solve some of the problems involved in finding suitable donors for human cardiac transplants.

Dr. Charles Hufnagel of Georgetown University Medical School disclosed a research project which seeks ways to treat the hearts of unborn calves so that the organs can be grafted into humans. Dr. Hufnagel said that if the search is successful and humans can be made to tolerate calves' hearts, a living heart bank could be established.

Such a bank would avoid the ethical problems involved with waiting for another human with a healthy heart to die, then taking his heart. Also, a critically-ill potential transplant recipient would not have to wait at the brink of death for a suitable donor to appear.

Dr. Christiaan Barnard, the South African surgeon who performed the first heart transplant, also has suggested that animals in future will be the source of transplant organs. He suggested pigs, noting that in several anatomical aspects "the pig is closer to the human being than any other animal." He did not indicate that any research on the subject is under way, however.

The valve from a two-month-old calf's heart already has been used to replace a defective human heart valve. In an operation in Tel Aviv, Dr. Morris Joseph Levy gave the valve to a young woman with a damaged mitral valve. She was reported doing well.

WASHINGTON

Study of Transplant Ethics Proposed

Senator Walter F. Mondale (D., Minn.) has proposed that a Federal commission be formed to study the ethical implications of heart and other organ transplants. Mondale made his suggestion in a letter to several sci-

entific, religious, and civic leaders. He says in the letter that he will introduce legislation in the next session of Congress to make possible a study of the ethical points raised by recent medical breakthroughs.

He includes among these breakthroughs not only the recent flurry of heart transplants, but also the possibility of the artificial production of life, and the chance that man may one day be able to modify his own genetic structure deliberately.

Among those receiving Mondale's letter were Drs. Christiaan Barnard, Norman E. Shumway, and Adrian Kantrowitz, the three surgeons so far to perform heart transplants.

LOS ANGELES

Cadaver Organ Pool Formed

The Los Angeles Transplantation Society has been formed by seven Los Angeles area hospitals to administer a pool of organs for transplant. The organs would be taken, subject to the permission of relatives, from the bodies of people who die in the hospitals. They would be available to recipients in any of the hospitals. The idea is to increase the chance of finding a suitable donor for a given recipient, a difficulty which has plagued the earliest transplant operations.

The pool at first will collect only kidneys. Later hearts, lungs, livers, and other organs will be added to the list. Announcement of the pool coincided with announcement of a method for keeping cadaver kidneys alive for three days, instead of the six hours formerly possible. Dr. F. O. Belzer, assistant professor of surgery at the University of California at San Francisco, has developed a pump which keeps the kidney nourished and supplied with oxygen. Dr. Belzer says his device makes it possible for hospitals all over the United States to join in a kidney pool. It also allows more time to search for a suitable recipient for a kidney.

MONTREAL

Computer Saves Coronary Victim

A computer-synchronized heart-assist pump has saved its first coronary sufferer, 47-year-old Samuel London of Montreal. London was suffering from cardiogenic shock, lung congestion, and failure in his single kidney following coronary blockage and extensive death of heart muscle tissue.

In a three-hour operation under only local anaesthetic at Jewish General Hospital, Dr. Jacob Rosensweig hooked the \$15,000 device, called a Simas pump, into London's aorta. The computer times the pump to draw blood out of the aorta when the left ventricle contracts in the pumping phase. This reduces the pressure against which the heart must pump, giving the muscle a rest. During the left ventricle's resting phase the pump forces back the blood it has taken, providing vigorous circulation to the heart and the rest of the body.

The computer is needed to match the action of the pump exactly with the changing pulse of the heart. After a few hours of such rest London's heart recovered enough to take over its job again.

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