

# medical sciences

## POLICY

### Mexico rules against human transplants

Mexico's Academy of Surgeons has ruled against major human transplants, not only of hearts, but of liver, lungs, small intestines and pancreas, until the chances of success are better. The problem of organ rejection is the hurdle.

The academy is not against animal research leading to human transplants, and says that as soon as the rejection is properly controlled, surgical investigation on humans will be resumed.

But the academy also stresses that in the interim period other aspects still not fully resolved should be clarified. These include the selection of recipients and donors, diagnosis of total death, and all ethical and legal problems—those that prevented a recent heart transplant in Mexico.

Surgeons in that country had gone so far as to have a special section of a Government hospital prepared for the operation. Donor and recipient were selected when plans were abruptly dropped because of unsolved aspects that caused concern in official circles.

Dr. Clement Robles, president of the academy, says that blood transfusions, skin transplants and "other accepted procedures in current use" have the academy's approval for Mexican surgeons.

## HEPATIC COMA

### Baboon's liver saves girl

A live baboon was used as a temporary liver to save the life of a girl dying of hepatic disease, transplant pioneer Dr. Christiaan Barnard told a meeting of the Australian Medical Congress in Sydney. He said it was the first time a patient had been revived from a hepatic coma—the last stage of liver disease.

His surgical team cooled a baboon to near the freezing point, and drained its body of all blood. They then washed all traces of the blood from the animal's organs and filled it with human blood of a type compatible with the girl's. They next connected the baboon's bloodstream to the girl's, warmed the animal and restarted its heart.

Dr. Barnard said that as the girl's blood circulated through the baboon's liver, the poisons that were causing her disease were apparently filtered out. After six hours she recovered from a deep coma and is now healthy.

## CARDIOLOGY

### Internal heart massager

A one-inch stab wound just under the breastbone is the simple technique used by a Detroit surgeon to insert an especially designed curved instrument that can be used to massage the heart when external massage fails.

Dr. Aran S. Johnson has tested the device on seven humans following extensive animal research. He was assisted in the engineering part of the procedure by Bert Prisk and Donald R. Whitney, engineers in the research laboratories division of General Motors Corp.

Writing in the September issue of MEDICAL TIMES, Dr. Johnson describes the conical-shaped plastic balloon on a catheter that is passed inside the patient's chest. A

pump with an air compressor and a volume-regulating device causes the balloon to massage the heart regularly.

He says his massager is intended for use on patients who do not respond within a five-minute period to external massage. Any licensed physician can master the technique, he believes.

## CARCINOGENESIS

### Radioactive jewelry causes cancer

Amputation of a man's finger because of a cancerous tumor that developed from radioactive gold in a cameo ring he had been wearing for a number of years is reported in a letter to the Aug. 19 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION from Drs. Theodore Gerwig of Tonawanda, N.Y., and Marvin Winer of Buffalo.

Radiodermatitis has been discovered in several other cases related to radioactive rings, but this is the first amputation known to have been necessary. Suspected rings were tested by John Harley, director of Health and Safety Laboratory of the U.S. Atomic Energy Commission. The amputation was done by Drs. Bernie Davis and Melvin Brothman at DeGraff Hospital in North Tonawanda.

Sores beneath a ring on the finger are fairly common, but they are usually caused by an accumulation of alkali soaps and detergents, not by radioactivity. Dr. Winer has had two cases of skin tumor among his patients, however.

The radioactivity in the rings apparently comes from gold originally used as tubes to hold radon 222, a radioactive material used in the 1930's for cancer therapy. The gold later may have been mixed in with other sources and sold to jewelers without being tested for radioactivity.

## PUBLIC HEALTH

### Tests for lead poisoning

Up to 16,000 cases of lead poisoning occur in the United States each year, and an average of 200 victims die, but no one knows how many thousands of children are still eating chips of paint with lead in it and suffering brain damage as a result.

Two tests are reported in the Aug. 23 issue of the MEDICAL WORLD NEWS that are expected to help in those hard-to-detect cases that do not show extreme symptoms of coma and convulsions. The number of cases without acute symptoms—some with no symptoms at all—is estimated as 25 times higher than the easily identifiable cases.

One of the new methods for routine tests of youngsters in susceptible slum areas is now being tested in Boston; it looks for lead in hair samples.

Dr. Harry Schwachman and Louis Kopito of Children's Hospital Medical Center in Boston discovered about 10 cases in July.

The other screening technique, developed in Chicago by Dr. Joseph R. Davis of Loyola University's Stritch School of Medicine, involves a urinary test for ALA, delta-aminolevulinic acid. ALA is found to remain at its high level for a year, even when the lead is absorbed into the bones.