

medical sciences

TOOTH TRANSPLANTS

Enzyme technique slows rejection

Slowing down rejection of tooth transplants could extend their usefulness to six or eight years, a Harvard dental scientist told a meeting of the International Association for Dental Research at Houston, Texas.

Dr. Leonard B. Shulman of Boston says he has tried an effective method with monkey teeth, which he cleaned in two enzymes—hyaluronidase and collagenase—before transplanting them.

The procedure is time-consuming but more effective than some other cleaning methods. The transplants are cleansed of the gum ligaments that had held them in their own sockets.

Dr. Shulman explained that three-hour baths of hyaluronidase destroys hyaluronic acid, a substance that helps hold soft tissue fibers together. The other ingredient of the bath, collagenase, attacks collagen, the fibers that make up connective tissue.

TRANSPLANTS

Uniform laws needed in all 50 states

Physicians are uncertain which state law they should follow in case a patient dies in a different state from that in which he donated certain organs of his body.

"Until the Uniform Anatomical Gift Act is adopted by the 50 states," a Government lawyer told a symposium in Las Vegas, Nev., "conflicts between diverse state laws dealing with transplants is inevitable."

Blair L. Sadler, a lawyer in the office of the director of the National Institutes of Health in Bethesda, says the prospects for adoption of the uniform law by the states is excellent. He urges all physicians and lawyers to encourage its enactment in their states.

One handicap in the bill is that a definition of death was left out. Those drafting it were of the opinion that "to freeze a definition into a statute could seriously impede future medical progress."

Professor E. Blythe Stason of Vanderbilt University, who handled the major portion of drafting the bill, told the National Medicolegal Symposium, "There are a few impatient persons in this country who are not content to leave the matter to consent—to gifts freely made."

SURGERY

Tonsillectomy and circumcision called ritualistic

Removal of the adenoids alone without tonsillectomy is probably sufficient to take care of middle ear infections and severe airway obstruction, an Akron, Ohio, pediatrician believes. Parents who subject their young children to tonsillectomy before the age of six may be fulfilling their own need, Dr. Robert P. Bolande says in the March 13 issue of THE NEW ENGLAND JOURNAL OF MEDICINE.

Tonsillectomy tends to be performed as a status symbol among the wealthy, he says, and to satisfy the impatience of parents with sick and irritable children.

The practice of circumcision as a ritualistic procedure in Asia, Africa, North and South America, Europe, Australia and Polynesia is well documented.

Circumcision among Christians has no religious connotation, Dr. Bolande says, since the teachings of St. Paul actually dissuaded early Christians from adopting ritualistic circumcision. He believes that adequate hygiene would be sufficient to prevent cancer among wives of the uncircumcised, although there is an unproved theory that mates of the circumcised have less cervical carcinoma.

WEIGHTLESSNESS

Effects on DNA synthesis should be studied

The day before Dr. Christiaan Barnard left the United States to return to Capetown and his next heart transplants (he plans at least two more in the near future) he told a House subcommittee that he proposed a study of the effects of weightlessness on dread diseases, including cancer.

Dr. Barnard discussed several experiments that he proposed in collaboration with Dr. N. C. Birkhead of the General Electric Company.

"Firstly," Dr. Barnard said, "we shall attempt to ascertain what, if any, alterations in DNA synthesis are brought about by space flight."

He interrupted his statement to give illustrations that indicated that the genetic apparatus as contained in DNA may be adversely influenced by removal from the earth's gravitational field.

Representative Joseph E. Karth (D-Minn.), chairman of the House subcommittee on space sciences and applications, pointed out that lack of funds had cancelled the future Biosatellite program last December, but did not rule out a possible resumption of such a program.

PUBLIC HEALTH

Tobacco strikes back

Drunk drivers cause hundreds of deaths each year on the highways and alcoholism kills its addicts. Taking a cue from the labeling on cigarette packages, Senator Strom Thurmond (R-S.C.) has introduced a bill to require every bottle of hard liquor containing more than 24 percent of alcohol to carry a health warning:

"Caution: Consumption of alcoholic beverages may be hazardous to your health and may be habit forming."

Senator Thurmond, who comes from a tobacco region, insists, tongue in cheek, that his bill is not a "prohibition measure," all it does is require a health warning label.

ARTHRITIS

Joints low on lubrication

A British team of doctors has suggested that arthritic joints may be low on lubricating oil. They are trying to produce the missing oil gel artificially, according to a report in the March 14 MEDICAL WORLD NEWS.

The study of friction and wear is a new branch of medical knowledge called tribology. Dr. Verna Wright, head of the Rheumatism Research Unit of the University of Leeds, explains that how a rheumatoid condition changes the oil, or synovial fluid, is not understood, but he and his colleagues are trying to develop an inert, water-soluble artificial polymer to replace it.

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