

medical sciences notes

TRANSPLANTATION

Teeth Stored for Later Use

Teeth are being taken from children seven to nine years old who are undergoing a straightening process and stored for as long as six weeks for use in transplants.

Of 45 teeth transplanted at the Medical College of Virginia, 44 are still in place—some of them for periods of up to 15 months. Thirty of these teeth were taken from other persons, and they seem to have worked as well as the 15 moved from other positions in the patient's own mouth.

The important thing is to find teeth that will fit the vacant spaces, coming close to the bone so they will be firm in the socket. Success, reported in the November DENTAL ABSTRACTS, has been achieved in these respects. X-rays show excellent union of tooth and bone with bone "fill-in" in some cases. Chewing is satisfactory and the appearance of the transplanted teeth is good. Nerves in the pulp chamber function in some of the teeth tested.

CHEMOTHERAPY

New Drugs Stop Hemorrhaging

Two new drugs—one of which is available commercially only in Europe—can stop a type of bleeding called fibrinolytic hemorrhage. In this kind of profuse bleeding, surgery or disease makes the body's clot-dissolving system too active.

EACA is the name of the drug available in the U.S. The European drug is called Trasylol. It occurs naturally in the pancreas, lungs and salivary glands of all mammals.

At a symposium organized by the Japanese Academy of Medicine in Tokyo in late November, Dr. Julian L. Ambrus of Roswell Park Memorial Institute in Buffalo described the drugs and said they have very few side effects.

Dr. Ambrus and his colleagues have studied the prevention and treatment of fibrinolytic hemorrhage in 226 patients. The condition occurs in urologic surgery or biopsy for bladder cancer, kidney disease, acute leukemia and other types of cancer.

It also occurs with open heart surgery when there is extended use of the heart-lung machine; in accidents of pregnancy or birth and in major abdominal or chest surgery.

EACA appears to work primarily by surrounding the blood clot and protecting it from the enzyme that dissolves it. Trasylol seems to stop the enzyme's action.

GYNECOLOGY

Transplants May Make Pregnancy Possible

Women with abnormal or non-functioning ovaries may eventually be able to bear children, a Temple University professor reports.

Dr. Hector A. Castellanos told a seminar that by transplanting healthy ovarian tissue from women being sterilized, barren women could achieve desired pregnancy.

Already he has done transplant operations on 12 young women—not with the immediate idea of making

pregnancy possible, but to remove symptoms comparable to menopause.

Dr. Castellanos developed the technique while working with Dr. Somers H. Sturgis, professor of gynecology at Harvard University. Fresh ovarian tissue was obtained from women under 35, minced and mixed with corneas that had been rejected from eye banks because of age or because they might have opaque spots.

If ovarian function can be provided by the technique in a sizable number of women, Dr. Castellanos says, his team will attempt to induce ovulation in women whose ovaries, instead of producing the female hormone estrogen, have been manufacturing the male androgen. By removing abnormal ovarian tissue such as this, and replacing it with normal tissue, the Temple researcher hopes to make ovulation and child-bearing possible.

HEMATOLOGY

Yemenite Babies' Blood Studied

An abnormal blood condition called Bart's hemoglobin, which indicates a latent form of Mediterranean fever, has been found in high percentage among Israeli babies of Yemenite descent.

A study of 3,218 newborns of different ethnic groups in Israel showed that babies of parents from the Yemen had an incidence of 17.3 percent of the abnormality. By contrast, Ashkenazi European Jews showed only 0.7 percent of Bart's hemoglobin, and babies of Jewish parents from Morocco and Algeria showed only 0.8 percent.

Negro and Chinese races are the only ones in which the incidence of the abnormality has been high, and even they show only five to 10 percent.

The study was made at the Sharon Hospital in Petah Tikva.

ANTISEPSIS

Frequent Hand Scrubbing Advised

Hospital personnel should cleanse their hands after each contact with a patient to prevent exchange of germs, a New York surgeon warns.

It has been thought that sporadic use of germicides on the hands would be enough to control bacteria, but a study of a group of recovery-room nurses at the New York Hospital-Cornell Medical Center shows that living organisms can be picked up from one patient and carried for as long as an hour on the hands.

The species of organism found most frequently is *Staphylococcus aureus*, Dr. Peter Dineen says in the November issue of SURGERY, GYNECOLOGY AND OBSTETRICS.

Either hexachlorophene detergent or antiseptic foam can give satisfactory reductions in bacterial count if used regularly, he reports.

"Patient contact in routine hospital duties varied in time from 20 to 30 minutes and involved taking observations of vital signs, turning patients, removing airways, starting intravenous infusions and changing linen," Dr. Dineen says.

"During this phase of the study, no subjects were used who had had contact with known staphylococcal skin lesions, such as a draining carbuncle."

Nevertheless, the infections were transmitted.

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