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COSMETIC PROSTHESIS RESTORES FACIAL DEFORMITIES—Facial Prosthetist Jane Lupton holds a plaster impression of a patient's face with total loss of the eye orbit. By using this impression, she can fit a prosthesis over the area that is to be replaced. The Facial Prosthesis Unit handles 115 active patients who have surgically incorrectable deformities due to birth defects, burns, cancer, trauma and accidents. Aside from eye sections, the unit also replaces noses, ears and portions of the skull. Facial prosthesis services started at Duke in 1945. As a singular unit, it is the only facility in the state that handles cosmetic facial restorations exclusively. (Photo by Dale Moses)

Facial Prosthesis Unit Pairs Ancient Art With Science

(Editor's Note: Duke was one of the first medical centers in the country to recognize the need for and value of facial prostheses and related cosmetic devices. A facial prosthesis service was established here in 1945 and today it is increasingly active. The following story by Dale Moses traces some of the history of facial prosthesis and its development with Duke.)

A cosmetic facial prosthesis is an artificial man-made replacement of a part of the face by means of non-living substitutes for the purpose of improving the recipient's appearance.

Traces of cosmetic prosthetic restoration may date back to the Etruscans whose civilization reached its height about 500 BC. Their civilization was the highest in Italy before the rise of Rome and these people were highly advanced in the art of intraoral prosthesis. It is also known that the Egyptians, in practicing the art of mummification, applied artificial eyes in their mummies and might have performed this skill on their living.

One of the earliest recorded contributors to the field of facial prosthesis, 16th century French surgeon Ambroise Pare, revealed, through his illustrations, the materials required for artificial facial restoration:

"Wherefore instead of the nose cut away or consumed, it is requisite to substitute another made by art; because that nature cannot supply that defect: this nose so artificially made, must be of gold, silver, paper or linen clothes glued together, it must be so colored, counterfeited, and made both of fashion, figure and bigness, that it may as aptly as is possible, resemble the natural nose."

Since Pare's experimental accounts, such ineffectual materials as ceramic,

porcelain, lacquer, acetate, metals and cellulose have been used to obtain a better prosthesis.

Despite its early beginnings, facial prosthesis, as an art and science, has remained a relatively unknown and unexplored field, and only a few leading medical centers in the United States have established facial prosthesis units.

In 1945, Duke instituted a facial prosthesis research and service program under the direction of Elon H. Clark within the Medical Art Division. Originally founded with the intention of providing services for Duke patients exclusively, by 1959 it was realized that an organized research program would be required to fulfill a patient's needs and desires, as well as to extend the service to other persons in addition to those admitted to Duke.

Additional support was needed and funds were approved by the Office of Vocational Rehabilitation, Department of Health, Education and Welfare, in 1960. Through continued funding over the following years, new and more effective methods and materials were discovered for nose and ear prostheses. In March of 1963, the Office of Vocational Rehabilitation provided the funds to establish a singular unit and the present Facial Prosthesis Unit (FPU) became a reality.

The past 13 years have seen constant improvements of the services offered to facially disfigured persons. In the 1960's the Prosthesis Unit, in cooperation with Chemstrand Research Laboratories, produced "Dukestran," a poly-vinyl chloride compound specifically designed for cosmetic facial restorations. "Dukestran" has proven to be superior to the previously used prosthetic materials in that it is easily colored and

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HEADPLATES RESTORE SKULL CONTOURS—The Facial Prosthesis Unit is equipped to make hard plastic headplates from plaster molds for patients who have skull damage. The headplate is surgically inserted, in the operating room, under a patient's scalp to restore the natural contour of the skull. (Photo by Dale Moses)

Will Direct Richmond Hospital

Ken Holt to Leave Duke

Kenneth M. Holt, an assistant director of Duke Hospital since November of 1969, has resigned to accept the post of executive director of Stuart Circle Hospital in Richmond, Va. His appointment in Richmond is effective March 1.

Holt, 41, is a native of Petersburg, Va., just south of Richmond, but his ties with Stuart Circle Hospital are more direct than that. His wife, Becky, is a graduate of that hospital's School of Nursing, and at the time they were married she was head nurse on pediatrics there.

Following graduation from East Carolina University with a B.S. degree in 1955, Holt worked as a bank manager trainee and then for six years with the Virginia State Department of Health.

In 1962 he returned to college and in 1964 earned a master's degree in business administration, specializing in health care administration, at George Washington University in Washington, D.C.

He served his hospital administration residency at Kern County General Hospital in Bakersfield, Calif., and from 1964-66 he was assistant administrator of Petersburg (Va.) General Hospital.

For the three years prior to joining the Duke Hospital administration, Holt was assistant director of Watts Hospital in Durham.

An assistant director at Duke, Holt has been administratively responsible for hospital-related functions of the chaplains' service, social service representatives, information services, the hospital auxiliary, facial prosthesis, medical records, obstetrics-gynecology

unit, pediatrics unit, public relations, radiology, pediatrics clinic, obstetrics and gynecology clinic and security.

Holt is a member of the American College of Hospital Administrators and the American Hospital Association.

He and his wife have four children.

Study to Ticket Traffic Offenses

Three medical center psychologists have received a \$13,850 grant to investigate psychological factors contributing to habitual traffic offenses.

The grant was awarded to Dr. Elaine K. Crovitz, assistant professor of medical psychology, who is the principal investigator; Dr. Mary Huse, assistant professor of medical psychology; and Dr. Larry Thompson, professor of medical psychology. It was given by the North Carolina Association of Insurance Agents, Inc.

"We're trying to work out a psychological profile of persons involved in serious repeated traffic offenses," Dr. Crovitz said. "We want to see whether psychological measures are definitive enough to predict driving habits and patterns."

The preliminary study will be done using two different groups of drivers—males age 16 to 24 and elderly drivers.

Dr. Crovitz said if some definitive tests can be worked out, they could be helpful to the Department of Motor Vehicles in determining traffic offenses.