200 CONFERENCE HEAR DISCUSSIONS OF HEAD AND NECK CANCER

Cancer of the head and neck constitutes some 15 per cent of the overall cancer incidence in the United States. At three of the specialized cancer hospitals, including MDAH, it accounts for about 25 per cent of the total number of patients seen. The majority of head and neck lesions are easily accessible so that early detection and treatment are possible.

These examination and treatment techniques were discussed from a variety of professional viewpoints at the Fourth Annual Clinical Conference, held November 13 and 14 at MDAH. The title of this conference was "Tumors of the Head and Neck."

Combined Therapy

Years ago surgical resection was considered inadvisable after irradiation because of the possibility of delayed healing, necrosis and hemorrhage. Likewise, radiation therapy was regarded as inadvisable after surgery because of the possibility that scar tissue formation might decrease radiosensitivity of the tumor. However, these hazards can be overcome by proper timing of the treatment procedures and improvement of the techniques.

A systematic approach by radiotherapists and surgeons, working as a team to determine the plan of therapy, was emphasized at the conference. This team works toward three objectives in the following order of importance: (1) the curative result, (2) the functional result and (3) the cosmetic result. The plastic surgeon works with this therapeutic team to get the best cosmetic results.

The Dentist's Role

R. Lee Clark, Jr., MDAH Director and Surgeon-in-Chief, opened the conference with a discussion of the dentist's vital role in detection of head and neck cancers.

External lesions of the head and neck are from five to eight times as prevalent in the Southwest as on the Eastern Sea-board because of excess exposure to sun. Dentists occupy a strategic position for detection of these skin lesions and for detection of cancer of the oral cavity. Many people, ostensibly in good health, report regularly to their dentist. Others consult a dentist for relief of symptoms that seem to be caused by a dental disorder but that may be oral cancer.

200 Attend

Attending the Clinical Conference were 200 physicians and dentists from Texas, 24 other states and the District of Columbia. This year, a national meeting of the medical and dental school cancer coordinators was held in the Texas Medical Center on the day before the Fourth Annual Clinical Conference to enable the cancer coordinators to attend the conference. A coordinator is designated at each medical and dental school in the United States to maintain a harmonious program of cancer research and education.

The Clinical Conference is sponsored annually by MDAH to share the latest information on diagnosis and treatment of cancer patients with the physicians and dentists in Texas and the Southwest. The University of Texas Postgraduate School of Medicine is co-sponsor. Support for the meeting was contributed in part by The American Cancer Society Texas Division and the Texas State Dept. of Public Health.

LUNG CANCER STUDY

Sputum collection is underway for the pulmonary exfoliative cytology research program instituted at MDAH in May 1957. The study, a joint project conducted with the National Cancer Institute, is an effort to develop methods for earlier and more accurate diagnosis of lung cancer. This will lead to improved treatment for patients with the disease.

A major objective of the study has been the development of improved techniques for sputum collection and for staining cells exfoliated from the respiratory tract.

CELL PHYSIOLOGY

To Be 14th Annual Symposium Topic

The physiologic considerations of the cell in relation to the cancer problem will be explored thoroughly at the Fourteenth Annual Symposium on Fundamental Cancer Research, to be held in Houston, February 25, 26 and 27. Spon-sored by MDAH, the symposium is entitled "Cell Physiology of Neoplasia." Co-sponsors are The University of Texas Postgraduate School of Medicine, the American Cancer Society, Texas Division, and the Texas State Department of Public Health.

Once a cell has established itself as a cancer cell, what does it do besides dividing much more rapidly than normal cells? Symposium speakers will approach this question from many aspects, including the following: nucleic acids, nuclear-cytoplasmic interrelations, the functional biochemistry of the cell.

Three outstanding foreign scientists will speak at the symposium. They are: P. C. Koller, Chester Beatty Research Institute, London, who will discuss "Readjustments in Boerner's Theory"; O. H. Caspersson, Karolinska Institute, Stockholm, Sweden, will discuss "Relations Between Nucleus and Cytoplasm in Normal and Malignant Growth," and Charles Oberling, Institut de Recherches sur le Cancer Gustave Roussy, Villejuif, France, who will speak on "Perspectives in Cancer Cytology."

Thirteen out-of-state speakers will participate. They are: William S. Beck, Massachusetts General Hospital, Boston; Morgan Harris, University of California, Berkeley; John S. Colter, Wistar Institute, Philadelphia; A. J. Dalton, National Cancer Institute, Bethesda; W. R. Duryee, George Washington University School of Medicine, Washington, D. C.; Thomas J. King, Institute for Cancer Research, Philadelphia; Riojun Kinosita, City of Hope Medical Center, Duarte, California; M. J. Kopac, New York University; Cecile Leuchtenberger, the Children's Cancer Research Foundation, Boston; Alex B.
Novikoff, Albert Einstein College of Medicine of Yeshiva University, New York City; J. Herbert Taylor, Columbia University, New York City; M. L. Watson, University of Rochester School of Medicine and Dentistry, Rochester, New York; and George Yerganian, Children's Cancer Research Foundation, Boston.

Five MDAH staff members will participate in the symposium. T. C. Hsu, head of the section of virology and electron microscopy, and Julian Blicharski will study leukemia.

Many of the recent studies of cancer cell physiology have been performed on *in vitro* mammalian cells. The work here at MDAH of T. C. Hsu, general chairman of the symposium, and of Douglas S. Kellogg is serving as a model for biochemical exploration of mammalian cells *in vitro*. For many years, mammalian cells were studied only *in vivo* because of difficulties in culturing the cells. Dr. Hsu's studies have brought out some of the missing information on cell physiology, cytogentic and cellular anatomy of mammalian cells *in vitro*.

T. S. Painter of The University of Texas, who also has devoted his whole scientific life to the study of the cell, is honorary chairman of the symposium. The symposia on fundamental cancer research are sponsored by MDAH. To register, write to Symposium Registration, MDAH.

### CANCER INSTITUTE DIRECTORS ORGANIZE

The directors of cancer research institutes in America have formed an organization, The Association of Cancer Institute Directors, to exchange information among the various institutes. The organizational meeting was held at Roswell Park Memorial Institute, Buffalo, N. Y.

Officers elected at the first meeting held in October at Memorial Center for Cancer and Allied Diseases in New York include: President, George Moore of the Roswell Park Memorial Institute; Vice-President, Sidney Farber of Children's Cancer Research Foundation, Boston, Massachusetts; Secretary-Treasurer, R. Lee Clark, Jr., MDAH.

### GRANTS AID RESEARCH

A total of 12 grants, totaling $136,251, to support research at MDAH were among the awards announced recently by the American Cancer Society, by the National Cancer Institute, and by the National Institute of Arthritis and Metabolic Diseases.

Amounts of and projects aided by the American Cancer Society grants are:

1. $1,000 in support of the Fourth Annual Clinical Conference on head and neck tumors, which was held at MDAH on November 13 and 14, 1959;
2. $5,000 in support of the Fourteenth Annual Symposium on Fundamental Cancer Research, which will be held at MDAH on February 25, 26 and 27, 1960. (See story, page 1.)

The grants by the National Cancer Institute of the U. S. Public Health Service were awarded to:

2. L. Dmochowski, virologist, J. A. Sykes, research associate and C. E. Grey, engineer designer, $27,416 for clarification of the role of viruses in the origin of leukemia in animals;
3. V. M. Doctor, associate biochemist, $4,320 for investigation of the metabolic relationships of folic acid and sex hormones;
4. Nylene Eckles, research internist, and George Ehni, associate surgeon, $16,100 for studies on the effect of pituitary stalk sections on breast cancer;
5. Gilbert H. Fletcher, radiotherapist, and Warren K. Sinclair, physicist, $14,836 for studies on a short source-skin distance cesium-137 teletherapy;
6. Saul Kit, associate biochemist, $12,000 for research on the chromatography and metabolism of the deoxyribonucleic acids of tumors;
7. R. J. Shalek, associate physicist, $592 for studies on the effects that radiation has on dilute solutions of lysosome;
8. H. Grant Taylor, chairman, Southwest Cancer Chemotherapy Study Group, $21,756 for establishment of group headquarters;
9. H. Grant Taylor, pediatrician, and W. W. Sutow, associate pediatrician, $17,044 for evaluation of ACTH and hydrocortisone used alone and in sequence with 6-mercaptopurine in the treatment of children with acute leukemia, a cooperative study.

The National Institute of Arthritis and Metabolic Diseases of the U. S. Public Health Service awarded a grant to the following MDAH staff member:

1. Darrell N. Ward, associate biochemist, $6,095 for investigation of the chemistry of luteinizing hormone.

### RESEARCH SEMINARS

Molecular biology is the subject of the seminar series now in progress at MDAH. Sponsored by the hospital, all interested physicians and scientists are invited to attend. The research seminar meets each Tuesday from 12 noon to 1 p.m. in the MDAH auditorium.

Guest speakers at forthcoming meetings include Edgar Altenburg of the Rice Institute; Stephen Zamenhof of Columbia University; T. Makinodan F. J. Serres and Waldo E. Cohn, all of Oak Ridge National Laboratory; and Hans F. Stich of Univ. of Saskatchewan.
SOCIAL WORKERS TRAINED IN MEDICAL SETTING

In August, the Worden School of Social Service awarded a master's degree to Helen C. Laugier on the basis of inservice training at MDAH, formal class work at the Worden School, and a dissertation. Mrs. Laugier has joined the MDAH medical social service staff as a case worker. One of the requirements for case workers here is a master's degree in social work.

The graduate training program in medical social service has been in operation at the hospital since 1958. The program combines classwork at the School of Social Work of The University of Texas in Austin or at the Worden School of Social Service of Our Lady of the Lake College in San Antonio, with practical training at MDAH. It is open to students who are working toward a master's degree in social work. At the present time, only four graduate students are accepted per year at MDAH.

In the two-year course leading to a master's degree, students who want to specialize in medical social work alternate six months of classwork at the schools with six months of training at the hospital.

Each student is assigned to an MDAH staff member for guidance, and the actual training by clinical demonstration is tailor-made to suit each student's needs. Usually, a student begins with a case where results are apt to be seen at once. Thereafter, student cases are chosen to develop each student's ability to "help the patients help themselves" in the majority of cases.

The student is trained to understand human behavior rather than make personal judgments. In working with the patients, the students are carefully supervised by a staff member.

Ruby F. Chiesa, case supervisor at MDAH, and Eula O'Donnell, senior case worker, supervise the students. "But," says Miss Chiesa, "the entire medical social service staff also help and keep their eyes open for cases that students can handle and that will contribute to their training."

The students attend regular weekly medical social service staff study periods. The study conferences are conducted by Edna P. Wagner, director of the hospital's medical social service department, other staff members in the department or by special lecturers.

One of the main functions of the educational program is to teach the graduate students to work with the doctor and the nurse as part of a team. Five graduate students have been trained at the hospital thus far.

The medical social service department at MDAH is in the division of patient care activities.

STAFF ACTIVITIES

Daniel P. Billen, section of microbiology, spoke on "The Consequence of Metabolic Alteration on Macromolecular Synthesis Subsequent to Irradiation" at the October 30 meeting of the Society of American Bacteriologists, Texas Branch, in Houston.

Arthur Cole, assistant physicist, presented two papers at the Radiological Society of North America meeting held in Chicago November 15-20. His talks were on: "Physical Studies on a Short-Treatment-Distance Cesium-137 Teletherapy Unit" and "An Improved Automatic Signal Plotter."

William S. Derrick, anesthesiologist, gave a refresher course in "Preoperative Cardiac Evaluation of Surgical Patients," and Richard C. Hay, assistant anesthesiologist, presented a paper entitled "Histologic Changes in the Spinal Cord Following Subarachnoid Alcohol" at the annual meeting of the American Society of Anesthesiologists, held Oct. 5-9 at Bal Harbour, Florida. Together, Dr. Derrick and Dr. Hay presented an exhibit "The Control of Intractable Pain in Advanced Cancer by Subarachnoid Alcohol Block," and a movie "Regional Block Analgesia for Surgery of the Head and Neck."

Leon Dmochowski and C. E. Grey, section of virology and electron microscopy, participated in the meeting of the Southwest Section of the American Association for Cancer Research, held October 16-17 in Ardmore, Oklahoma. Their paper on "Submicroscopic Morphology of Normal and Malignant Cells: A New Approach," was presented by Mr. Grey. Dr. Dmochowski was elected Chairman of the Southwestern Section of the American Association for Cancer Research.

Gilbert H. Fletcher, radiotherapist, participated in the October 29-November 1 meeting of the Mexican Society of Oncologic Studies in Mexico City, Mexico. He presented a paper "Present Status of Radiation Therapy in the Treatment of Carcinomas of the Uterine Cervix" and took part in a panel discussion on "Supervoltage Roentgen Therapy for Patients with Head and Neck Cancer."

Renilda Hilkemeyer, department of nursing, presented a paper on the "Nursing Care of the Cancer Patient" and took part in a panel discussion at the Faun S. Mulliken Symposium on Cancer for Nurses, held in St. Louis, October 7.

C. D. Howe, department of medicine, was in Washington, D. C., November
9-12 to attend the Conference on Experimental Clinical Cancer Chemotherapy as a member of the Southwest Cancer Chemotherapy Study Group. Other staff members who attended the Washington meeting were: R. Lee Clark, Jr., director and surgeon-in-chief; W. W. Sutow, and Daniel E. Bergsagel.

Richard H. Jesse, assistant surgeon, presented the Blackford Memorial Lecture on “Some Newer Aspects of Surgery in Relation to Cancer” in Denison, Texas, November 11.

Gordon C. Johnson, assistant radiologist, and Robert L. Egan, assistant radiologist, participated in the November 15-20 meeting of the Radiological Society of North America held in Chicago. Their paper on “Multisection Transverse Tomography in Radium Implant Calculations” was presented by Dr. Johnson.

William S. MacComb, head and neck surgeon, presented “Treatment of Cancer of the Thyroid” and “Treatment of Intra-Oral Cancer” as part of a panel on thyroid at the meeting of the Mexican Society of Oncologic Studies in Mexico City, Mexico, October 29-November 1.

Richard G. Martin, associate general surgeon, spoke on “Management of Polyps of the Gastrointestinal Tract” and “The Management of Soft Tissue Sarcomas” at the Fourth Annual Cancer Conference, sponsored by the Louisiana State University School of Medicine and the American Cancer Society, in Shreveport, Louisiana, November 4.

Lowell S. Miller, associate radiologist, presented an exhibit on “Supervoltage Irradiation in Carcinomas of the Urinary Bladder” at the Radiological Society of North America meeting in Chicago, November 15-20.

Robert S. Nelson, section of gastroenterology, was a member of the panel discussing “Advances in Gastroenterology” at the Southern Medical Association meeting held November 16-19 in Atlanta, Georgia.

Raymond G. Rose, section of radioisotopes and endocrinology, spoke on “Radioactive Iodine in the Diagnosis and Treatment of Thyroid Cancer” and “Radioactive Isotopes in the Diagnosis of Cancer” at the First National Cancer Assembly held October 28-31 in Mexico City, Mexico.

Felix Rutledge, gynecologist, spoke on “Lymphadenectomy as an Adjunct to Radiation Therapy of Carcinoma of the Cervix,” “Ovarian Carcinoma with Regard to some Therapeutic Problems,” and “The Evaluation of Lymphadenectomy in Therapy of Cervical Cancer” at the Society of Pelvic Surgeons meeting held October 22-26 in Richmond, Virginia.

C. C. Shullenberger, section of hematology, participated in the panel on Chronic Leukemia at the Conference on Experimental Clinical Cancer Chemotherapy held in Washington, D.C.

Warren K. Sinclair, physicist, pronounced on November 18, at the Work in Progress in Radiological Physics session of the Radiological Society of North America meeting in Chicago, and acted as chairman of the Physics Committee.

John S. Stehlin, Jr., assistant general surgeon, presented an exhibit on “Regional Chemotherapy Perfusion Techniques” at the November 11-12 Conference on Experimental Clinical Cancer Chemotherapy in Washington, D.C. Dr. Stehlin and R. Lee Clark, Jr.,

“GENETICS & CANCER”

The second volume in the series of MDAH symposium monographs was published in November. The book, GENETICS AND CANCER, is a collection of the papers presented at the Thirteenth Annual Symposium on Fundamental Cancer Research, which was held in February 1959. Publisher of the book is the University of Texas Press in Austin.

In the group of papers presented, the fundamental aspects of genetics in cancer etiology, tumor progression, and inheritance of cancer susceptibility are described. The timeliness of the subject is indicated by the fact that in 1958 geneticists received both the Nobel Prize for Medicine and the Lasker award.

Among cancer researchers during the past decade there has been an increasingly strong and widespread conviction that initiation of the neoplastic process involves disturbances in the genetic control of cells, and that tumor progression depends on the genetic constitution of the host. This book on the subject is divided into six sections. They are: Genetic Theory of Cancer Etiology, Fundamental Aspects of Genetics in Carcinogenesis, Gene Interaction in Neoplastic Growth, Bertner Foundation Lecture, Genetic Basis of Cell Resistance, and Heredity and Human Cancer. The price of Genetics and Cancer, now available, is $8.50. The book may be ordered through the Editorial Office, M. D. Anderson Hospital, Texas Medical Center, Houston 25, Texas.

participated in the Western Surgical Association meeting on November 20 in Colorado Springs, Colorado. Their paper on “The Leakage Factor in Perfusion Techniques” was presented by Dr. Stehlin.

Herman D. Suit, assistant radiotherapist, spoke on “Design and Use of Wedge Filters to the Mev Van de Graaf X-Ray Machines” at the meeting of the Radiological Society of North America, held in Chicago, November 15-20. Dr. Suit also presented an exhibit, “Use of IR192 and Co60 wires in Interstitial Therapy.”

E. C. White, general surgeon, participated in a conference of Chairmen of Departments of Surgery of American and Canadian Medical Schools, which was sponsored by the Division of Biology and Medicine of the United States Atomic Energy Commission and by the Medical Department of Brookhaven National Laboratory, in Upton, New York, October 26-27.

Stewart A. Wilber, assistant anesthesiologist, was an invited speaker at annual meeting of the American Association of Inhalation Therapists in Philadelphia, Pennsylvania, November 17-19. He spoke on “For Want of Oxygen.”

STAFF PUBLICATIONS

Recent papers published include the following by:


Nelson, R. S.: Gastroscopic Photography in the Demonstration of Gastric Tumors. The Bulletin of Gastroscopy and Esophagy, 6:7-9, August 1959.
