

M I N U T E S

Special Committee on the
University of Kansas Medical Center

July 27-28, 1976

July 27, 1976

Members Present

Representative Denny D. Burgess, Chairman
Senator Edward F. Reilly, Vice Chairman
Representative Bill Morris

Staff Present

Marlin Rein, Kansas Legislative Research Department
Emalene Correll, Kansas Legislative Research Department
Norman Furse, Revisor of Statutes Office

The Special Committee on the University of Kansas Medical Center convened at 10:00 a.m., Tuesday, July 27, 1976, with Representative Denny D. Burgess presiding. University officials present included Chancellor Archie Dykes and Dr. Jack Walker, chairman of the Department of Family Practice. The meeting was called to order in the conference room of the Family Practice Building.

The staff advised the Committee of the various materials that had been filed in their notebooks which had been furnished by the University following the June 29-30 meeting. Senator Reilly requested that the University furnish the Committee a copy of the University's formal reply to the survey made by the Joint Commission on Accreditation. Marlin Rein advised the Committee of an error found on page 1 in the original minutes for June 29-30. The draft minutes indicated that legislation requires enrollment in a master's degree program as a condition for accreditation of a nursing training program. This item should be corrected to indicate that the rules and regulations of the State Board of Nursing require this level of education. Upon a motion by Representative Morris which was seconded by Senator Reilly, the minutes of the June 29-30 meeting were approved as corrected.

Dr. Walker, chairman of the Department of Family Practice, reviewed briefly the circumstances which had occurred in medical education in the past 20 years resulting in the present shortage of general physicians. Dr. Walker traced the era of the increased specialization in medicine to the period following World War II. Increased sums of federal money were available at that time to finance medical research and resulted in a vast explosion of medical knowledge and the elevation of medical care to the best the world has ever known. This increase in medical knowledge encouraged physicians to concentrate their training in selected areas. The paradox of this increased specialization was that as more and more physicians concentrated in areas of specialized medicine, a commensurate decline in the number of physicians going into general medical practice occurred. As a consequence, during the periods of the 1950's and 1960's medical schools were largely training specialists and were not producing sufficient general family physicians needed to ensure an adequate supply of general practitioners. In approximately 1968 a turnaround occurred as a result of the recognition by the medical profession of a problem which had developed. The Board of Family Practice was created in 1969 to grant additional status to those physicians entering general practice. Today there are in excess of 260 training programs established in Family Practice of which approximately 60 are located in medical schools and the remainder in community hospitals. There are now approximately 4,000 residents enrolled in such programs.

The University of Kansas Medical Center program in Family Practice was created in 1970. In July, 1971, Dr. Walker was employed as head of the department. The first year was devoted to the development of the curriculum, employment of faculty members, and securing program approval by the national accrediting board. The first three students entered the program in July, 1972. Growth of the program is evidenced by the fact that in July, 1973, there were a total of nine students in the program; July, 1974, a total of 15 students; and July, 1975, a total of 19 students. In July, 1976, with the enrollment of new residents, the total enrollment in the Family Practice program rose to 24.

The department is staffed by four full-time physicians in addition to Dr. Walker. These physicians are experienced in family medicine, each having a minimum of ten years in general practice. The Family Practice Department also includes a support staff of 38 persons to assist in carrying on the program. In June, 1976, 1,800 patients visited the Family Practice clinic.

The building which houses the Department of Family Practice was initially purchased by the Endowment Association at a cost of \$600,000. The purchase price is being repaid by the University over a period of years at the rate of approximately \$75,000 per year. In addition, the Family Practice Corporation has spent approximately \$100,000 for renovation of space within the building.

Third-year students in Family Practice rotate to either Norton or Kingman for two months of their final year of training. Of the six graduates completing the program in June, 1976, three remained in Kansas; Topeka, Salina, and Kingman; with the other three leaving the state and going to California, Oklahoma, and Utah.

Dr. Walker conducted a tour of the Family Practice facility and responded to questions raised by the Committee in the process of the tour. During the conduct of the tour, the Committee noted that no x-ray equipment had as yet been acquired by the Department of Family Practice. Dr. Walker indicated that such equipment would be desirable inasmuch as patients who come to the clinic requiring chest and other x-rays must go to the Department of Radiology in the general medical center complex, sometimes waiting up to three hours for an x-ray.

Dr. Walker also indicated one of the problems which handicapped the Department of Family Practice residency program was that only three hospital beds were devoted to the Department of Family Practice. He indicated that as many as eight to ten would be desirable and could be utilized fully by the growing caseload of Family Practice Department. He also observed that there are demands for additional beds in other specialties and that this problem might not be satisfied until the new clinical building is occupied.

The Committee continued its discussion with University officials over the lunch period. The Committee was joined by Dr. David Waxman, Vice Chancellor; Dr. Virginia Savin, Department of Medicine; Mary Beth Skelton, Department of Emergency Medical Services; and Dr. James Loman, Director of the Mid-American Cancer Center. Dr. Waxman handed out several materials to evidence the growth in the number of primary care residency developed in Kansas. In addition, he spoke of the continuing efforts of the University to increase Outreach activities in the state and the efforts in assisting communities in the securing of physicians. The materials distributed by Dr. Waxman are attached to the minutes as Attachment I.

Dr. Virginia Savin of the Department of Medicine spoke to the Committee concerning the kidney and urinary tract disease programs at the University. Handouts of the material provided by Dr. Savin are enclosed as Attachment II to these minutes. Dr. Savin indicated that the University acquired 22 home dialysis machines some four years ago which are rented to home dialysis patients. She stressed that home dialysis required support of the family member or a friend to assist the patient. She indicated that the average annual cost per dialysis on a home-basis would approximate \$12,000. The cost in most cases is defrayed largely by funds through the Social Security Act and some third-party insurers. She stressed that employers must accept the limitations of such employees in the continued employment of persons with renal disease and a high level of family understanding is required to support such individuals.

Mary Beth Skelton of the Department of Emergency Medical Training visited briefly with the Committee about efforts of that department to upgrade training programs in the state in emergency medical training. Copies of her presentation are enclosed as Attachment III.

Dr. James Loman of the Cancer Center visited with the Committee briefly about efforts made by the University to increase early diagnosis and improved treatment of cancer in the state. Materials handed out by Dr. Loman are enclosed as Attachment IV.

Following the luncheon meeting, the Committee adjourned to the University Room of the University of Kansas Medical Center for a brief meeting with the chairmen of a number of the clinical departments. Persons joining the Committee included Dr. Kermit Krantz, Department of Obstetrics-Gynecology; Dr. Arch Templeton, Department of Radiology; Dr. Warren J. Humphrey, Department of Surgery; Dr. Jack Walker, Department of Family Practice; Dr. Robert Kugel, Vice Chancellor of the University of Kansas Medical Center; Dr. Burt Dudding, Department of Pediatrics; and Dr. William Ruth, Department of Medicine.

Dr. Humphrey made a brief presentation on the advantages of continuation of the existing private practice corporation arrangement presently in use at the University of Kansas Medical Center. He feels that the present arrangement provides the proper balance between University control of private practice corporation activities and still permitting sufficient incentives to the physicians to carry on an active practice. A copy of Dr. Humphrey's presentation is attached to these minutes as Attachment V. Brief comments were also made by Drs. Krantz and Ruth relating to the same subject. Dr. Krantz spoke of his experiences in Vermont, New York, and Arkansas citing the disadvantages of those experiences as compared with the University of Kansas Medical Center. He noted that in the State of Arkansas all faculty are full-time and funded totally by the University. Dr. Krantz indicated that faculty had no incentive to treat patients and as a consequence, utilization of the hospital was less than desirable. He also stressed that the establishment of the private practice corporations in Kansas has improved the level of patient care. Under the current arrangement all patients in the institution are used for instruction. He cited that 15 years ago this was not the case with two levels of care provided; clinic patients and private care patients. Dr. Krantz stressed that the institution could not risk losing the physician incentive by adjusting the current arrangement. He cited that the obstetrics-gynecology FY 1977 budget, of which he is the clinical department chairman, was financed only 14 percent by state funds.

The Committee adjourned the meeting with the clinical department chairmen at 2:45 p.m. to move to the Battenfeld Auditorium in the Student Center for the public hearing. The hearing was held to permit the general public, the staff of the hospital, and students to visit with the Committee and to express any views regarding the Medical Center that they wished. A list of the persons registering at the hearing is attached to the minutes as Attachment VI. A transcription of the hearing is also enclosed.

July 28, 1976

The Committee met at 9:00 a.m. in the University Room prior to departing on a tour of selected hospitals in the greater Kansas City area. The Committee held a brief meeting for purposes of planning the next meeting of the Committee. It was generally agreed that August 9-10 the Committee would again meet in Kansas City assuming that Representative Wingert and Senator Campbell could be available on those dates. Staff was directed to confirm such date with the two Committee members. Representative Morris requested a copy of the organization chart of the University of Kansas Medical Center. The Committee also requested staff to provide a general briefing on the operation of the University Medical Center to include the following:

1. Relationship of the corporation to the hospital both as to sharing of cost and income;
2. Physician compensation including all fringes; and
3. Relationship of the Endowment Association to the University of Kansas Medical Center.

Representative Morris also requested that the University of Kansas Medical Center provide financial statements on all the corporations similar to the type of material provided by Dr. Ruth at the previous day's meeting.

The Committee then departed for a tour of Osteopathy, Baptist, Research, and Menorah Hospitals in the Greater Kansas City area. All visits consisted of brief discussions with the administrators of the institution and an abbreviated tour of selected facilities. The following are brief summations of information gathered and observations made at each of the hospitals.

Osteopathy Hospital

The present facility is approximately four years old and was constructed to provide 426 single patient beds. At the present time the hospital only utilizes 248 beds with the top two floors presently unoccupied. The delays in filling the hospital were attributed not to lack of patient demand but of the institution's inability to acquire the necessary nurses and other allied health personnel to staff the remainder of the hospital. The Committee was advised that the hospital's beginning nursing salary was approximately \$4.78 per hour (this would equate to approximately \$850 per month).

Baptist Hospital

The Baptist Hospital is a 365-bed facility. During the visit to the institution, the Committee spent a majority of its time visiting the model family care center. The center provides an active outpatient treatment facility together with educational opportunity for 18 residents in family practice. The family care center was initially funded by a \$250,000 grant from a private gift. The center operates as a separate corporation, paying its own staff, rental expense to the hospital and purchases all laboratory and x-ray services, computer time, supplies, etc.

Several years ago Baptist Hospital made a decision to place increased reliance on registered nurses and to reduce the utilization of licensed public nurses and aides. At the present time, of the nursing care staff approximately 75 percent are registered nurses whereas prior to the change in policy only approximately 50 percent of the personnel were RNs. While the Committee was advised that the cost was greater, the institution feels that the quality of nursing is greatly enhanced. The hospital's starting salary for a registered nurse is \$825 per month. No additional funds for salary are provided as a shift differential. The Committee was advised that approximately 175-180 registered nurses are employed in the in-patient, emergency, and operating departments. The hospital has also broken the typical nursing organizational structure by no longer having a director of nursing. The department has employed a PhD. educator-type individual who coordinates all the nursing units. There are six separate nursing areas or units each supervised by an RN director. The Committee was advised that this organizational structure moves all nursing decisions closer to the bed. Baptist Hospital has found that it has enhanced employee morale and performance.

Research Hospital

Research Hospital presently has 521 beds of which approximately 18 percent are private rooms. The institution is expanding to 860 beds which will all be private. Research Hospital is conducting a nursing program for some 400 students. The hospital has residency programs in internal medicine, surgery, obstetrics-gynecology, emergency room, and nephrology. The Committee was advised that the starting salary for a registered nurse in Research Hospital was approximately \$825, which amount will go to \$873 in the near future. A ten percent premium pay is also provided as a shift differential. The Committee was advised that the Kansas City Area Hospital Association recently conducted a study on nursing salaries and staffing in all the hospitals, a copy of which report was requested by the Committee staff.

Menorah Medical Center

Menorah Medical Center has just recently moved into a new 153-bed unit. At the present time the institution is operating 359 beds. Upon completing of the renovation of the older units, the total bed capacity will increase to 360 beds. The starting nursing salary paid at Menorah is comparable to that of the other hospitals. Menorah also pays a \$.50 per hour shift differential for nursing staff.

The Committee visitations to the four community hospitals could be summarized by saying that the Committee was generally impressed by the cleanliness of each of the hospitals and the high level of administrative expertise evidenced by the hospital administrators. Most of the institutions shared concern about adequate availability of trained nursing personnel and stressed that the present nursing problem would become acute with continued expansion of clinical facilities in the Kansas City metropolitan area and the demands it would make on the existing pool of available manpower.

Prepared by Marlin Rein

Approved by the Committee on:

Aug 23, 1977

(Date)

Henry D. Burger

(Chairman)

I

Dr. Jack D. Walker, Chairman, Department of Family Practice, has defined four factors which have had the strongest influence on the final geographical location of graduates of the University of Kansas School of Medicine between the years 1951 and 1960. These are:

1. Prior state residents (Kansas accepts over 90% of its beginning medical school class from residents of the State of Kansas).
2. Degree of specialization and urbanization (the new family physician as well as the other medical practitioners demand readily available consultation, group practice arrangements and availability of a large medical center as a resource).
3. Subjective attitudes - economics, climate, recreational facilities and wife's desires (a definitely positive Chamber of Commerce approach needs to be undertaken to describe the quality of life available in rural Kansas).
4. Location of residency training (the Integrated Family Practice Program is one example of increasing the number of primary care training positions in the State of Kansas).

The following programs are being implemented and expanded to increase the number of primary care physicians practicing in Kansas:

1. Early indoctrination of premedical students as observers in the offices of Kansas family practitioners.
2. The Expanded Preceptorship Program.
3. Development of a Physicians Information Exchange.
4. Kansas Health Day
5. The Locum Tenens Program
6. Increasing the role of the Medical Center as a medical resource for physicians out in the state utilizing watts lines and actual onsite counseling. Expanding the role of continuing education in supporting medical education out in the State.

Number of primary care first year positions in Kansas.

Discipline	Kansas City	Wichita
Medicine	20 + 4 (Topeka)	15
GYN-OB	4	4
Pediatrics	7	4
Family Practice	<u>8</u>	<u>20</u>
TOTAL	43	43

There are approximately 171 first year positions in the State.

Of 169 graduates of the class of 1976, 71 are taking their first year training in the State of Kansas.

43 graduates of the class of 1976 are taking primary care training in the State of Kansas

42 graduates of the class of 1976 are taking primary care training out of the state.

A consideration has been given towards increasing the recruitment of Kansans in our residency training positions.

KIDNEY AND URINARY TRACT DISEASE PROGRAMS AT THE UNIVERSITY OF KANSAS

A summary of the year January, 1975 to December 31, 1975

The Faculty

Arnold Chonko, Asst. Prof. Medicine	Winston Mebust, Prof. Surgery
Donald Cross, Asst. Prof. Medicine	George Pierce, Assoc. Prof. Surgery
F. E. Cuppage, Prof. Pathology	Virginia Savin, Asst. Prof. Medicine
Dennis Diederich, Assoc. Prof. Medicine	Pat Stein, Asst. Prof. Clin. Dietetics
John Foret, Prof. Surgery	Paul Schloerb, Prof. Surgery
Jared Grantham, Prof. Medicine	Larry Sullivan, Prof. Physiology
Creighton Hardin, Prof. Surgery	John Weigel, Assoc. Prof. Surgery
Arlo Hermreck, Assoc. Prof. Surgery	Dan Welling, Assoc. Prof. Pathology
Billy Hudson, Assoc. Prof. Biochemistry	Larry Welling, Asst. Prof. Pathology
Michael Linshaw, Asst. Prof. Pediatrics	Frederick Whittier, Assoc. Prof. Medicine

Income to the Medical Center for Kidney Disease

1. Hospital Revenue	\$1,287,990
2. Physician Revenue	889,340
3. Research Grants and Contracts	<u>589,335</u>
Total Income	\$2,766,665

Service to People

Inpatient Admissions	1,142	Hospital dialysis procedures	2,318
Outpatient Visits	5,341	Home dialysis procedures	1,424
		Transplants	26

Service to Scholarship

Thirty publications in scientific journals

Teaching

600 Medical students
 168 nursing students
 165 house staff
 3 clinical fellows
 2 research fellows

RENAL DIALYSIS PROGRAM
PROPOSED BUDGET 1977-78

Salaries and benefits	410,399
Dialysis equipment (depreciation only)	100,025
Dialysis supplies	482,298
Education, phone, maintenance, travel	<u>14,800</u>
Total	1,007,222

Sources of Income

Dialysis patient generated fees	709,776
collection rate	<u>90%</u>
Total projected hospital fees	638,798
State support of presently funded personnel	255,381
Department of Medicine support	7,500
Total presently funded	901,679
Additional State support needed	<u>105,543</u>
Total Program Budget	1,007,222

Cost Savings to KUMC Dialysis Patients during a total experience of 187 patient-years

A. Renal Transplants

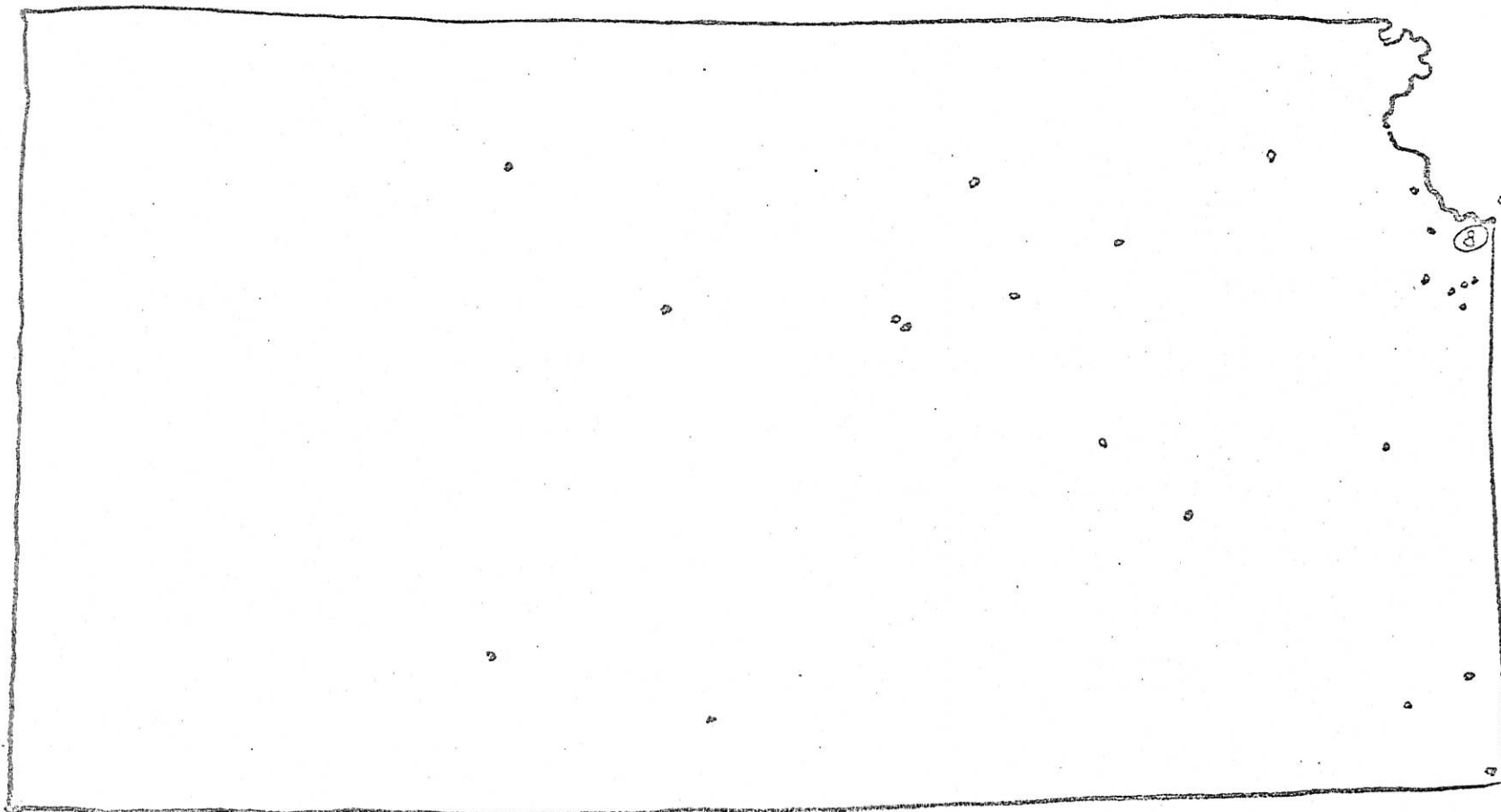
1. 41 patients with an average success of 4 years at a savings of \$14,000/year after first year	\$1,700,000
2. 20 unsuccessful transplant at a cost of \$15,000 each	<u>- 300,000</u>
Total Savings from Transplants	\$1,400,000

B. Home Dialysis

40 patient years at a savings of \$10,000/year	\$ 400,000
Total Savings over center-based dialysis	<u><u>\$1,800,000</u></u>

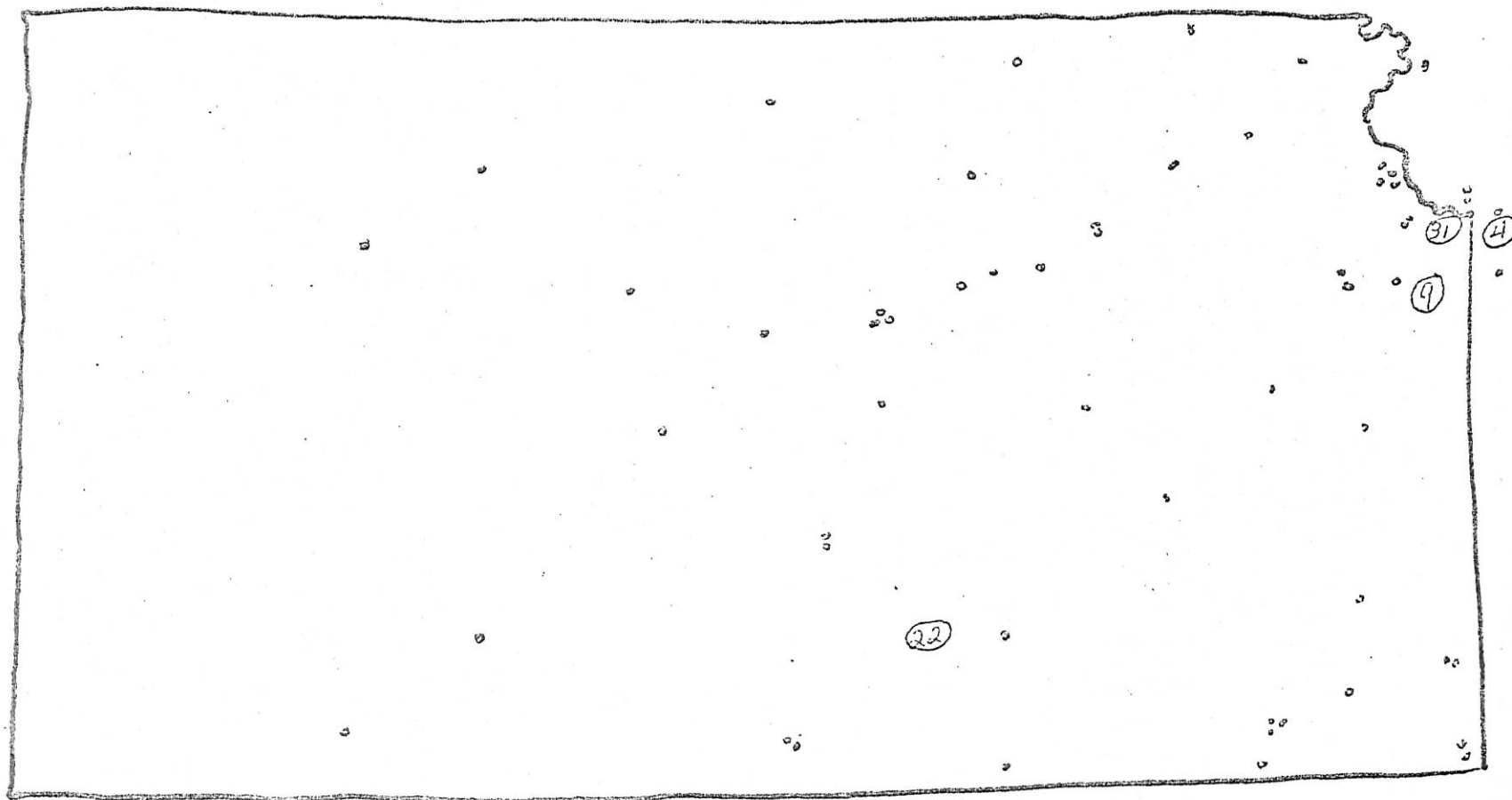
KUMC HOME DIALYSIS PATIENTS

August 1972 - April 1976



KUMC DIALYSIS PATIENTS

1969 - April 1976



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EMERGENCY MEDICAL TRAINING

OUTREACH PROGRAM

In 1973 the State of Kansas had 10 registered Emergency Medical Technicians and no state certified Emergency Mobile Intensive Care Technicians. Today, we have trained 2700 EMT's and 110 EMIC's with 18 more joining the ranks in two weeks.

There are 82 Instructor/Coordinators throughout the state teaching, with the assistance of their local medical society, 40 EMT Programs this fall and 47 scheduled for the spring of 1977. There are EMIC training programs established at KUMC, Wichita, and Hutchinson with new programs starting in Dodge City, Garden City, Pratt, and Kansas City, Kansas this fall. These training programs supply the personnel for advanced life support systems in Kansas City, Kansas, Johnson County, Topeka, Wichita, Winfield, Newton, and Hutchinson. New systems are being established in Dodge City, and Garden City.

This means to the people of Kansas that 1 out of 1000 people is a trained EMT. Forty-two per cent (42%) of the State's population has access to advanced life support systems within 10 minutes and this figure should rise to 65% by the fall of 1977.

Kansas is currently recognized as a leader nationally in the area of emergency medical training. The student guide for the National paramedic teaching curriculum developed through the Department of Transportation, is now being revised by the Emergency Medical Training Office staff and the National registry examination for paramedics that was developed through the EMIC offices is now being pilot tested in Denver and Chicago.

The financial support for these programs, and activities has come from grant monies. The budget for FY 76 was \$165,430.00. Of this, \$12,000 was supplied by the University for an instructors position. The Emergency Medical Training Office is designated by state law to maintain the state registry. The job of keeping up to date with 2700 EMT's and 128 EMIC's is becoming overwhelming and computerization of these records will soon have to be implemented.

Requests come in daily from individuals seeking EMIC training. To help meet this demand, the establishment of a Bachelor of Science Degree Program in Emergency Medical Services Administration was proposed to the chancellor's office this spring.



UPDATE ON LUNG CANCER

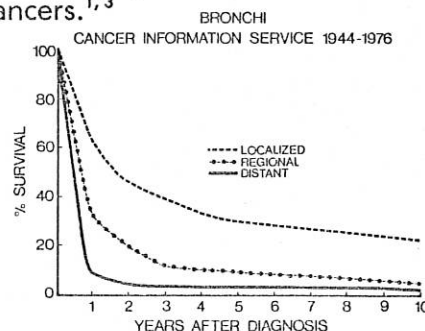
In the United States, bronchogenic carcinoma is the number one cause of cancer death in males and the third cause of cancer death in females. It has been estimated that 75,000 Americans will die of this disease in 1976.

Cigarette smoking is a major etiologic factor and it has been conservatively estimated that 80% of bronchogenic carcinoma could be prevented; yet the rate of cigarettes smoked per unit of population has not decreased in spite of intensive anti-smoking crusades. And, though filters have been shown to reduce tars, it is not yet certain whether they significantly reduce exposure to carcinogens. Thus, it is now apparent that this malignancy will plague our society for many years and we must address ourselves to the difficult task of finding better methods of treatment.

Ninety per cent of patients with bronchogenic carcinoma die of their disease and there has been no improvement in the overall survival rate for many years. At present, the greatest promise for improvement lies in early detection. Programs at several centers, including Sloan-Kettering Memorial Hospital and the Johns Hopkins Hospital, screen high-risk populations with frequent sputum cytologies, and special chest x-rays, which are read independently by two radiologists. If these studies detect even a slight abnormality, tantalum powder bronchography and fiberoptic bronchoscopy are performed. In a small group of patients who had lesions detected in this manner that were not yet visible on standard chest x-rays, the projected cure rate was 60%.¹ Although it may not prove economically feasible to screen the large population at risk every three or four months, the availability, safety and diagnostic capabilities of fiberoptic bronchoscopy all tend to support its early use in any high-risk patient with the slightest suggestive symptom.

There are no new surgical procedures that offer increased chances for cure, but mediastinoscopy performed as a staging procedure has been found to reduce the number of "open and close" thoracotomies. Furthermore, resection in patients with a "negative" mediastinoscopy yields a better chance for cure. While its use is still considered controversial,² many authorities now recommend routine

mediastinoscopy prior to resection of all bronchogenic cancers.^{1,3}



Chemotherapy for lung cancer, with the exception of small cell undifferentiated (oat cell) carcinomas, remains disappointing in this country. In a recent report from Japan,⁴ however, long-term postoperative treatment with mitomycin C and chromomycin A3 was found to improve significantly survival rates following resection of primary lung cancers. In this 10-year study of several hundred patients, the overall 5-year survival rate for patients treated by resection plus adjuvant chemotherapy was 51% compared to 23% for controls treated by resection only. The 5-year survival rate for patients receiving this chemotherapy after "palliative" resections was 36% compared to 4% for those with resection only. In this country, increasingly good results are being obtained in "oat cell" carcinoma.

Immunotherapy may also prove a valuable adjunct to resection. Clinical reviews have suggested that lung cancer patients who develop postoperative empyema have higher cure rates than patients without this complication.⁵ McKneally and associates have recently reported prolonged tumor-free intervals and increased life-table survival cures for patients who are given intrapleural injections of BCG (Bacillus Calmette Guerin, a bovine Mycobacterium) in the immediate postoperative period as compared to resected patients without BCG therapy.⁶

George E. Pierce, M. D.
Associate Professor of Surgery
University of Kansas Medical Center

1) *Curr Prob Surg* (Dec) 1974.
2) *Ann Thorac Surg* 18: 433-435 (Oct) 1974.
3) *J Thorac Cardiovasc Surg* 64: 382-390 (Sept) 1972.
4) *J Thorac Cardiovasc Surg* 70: 590-605 (Oct) 1975.
5) *N Engl J Med* 287: 1013-1017 (Nov 16) 1972.
6) *Surg Forum* 26: 164-165, 1975.

LUNG

AN EARLY LUNG CANCER

Screening program (comprised of men 45 years or older who smoke one or more packs of cigarettes daily) detected ten early lesions on initial examination and five on follow-up examination from a group of 34 patients with no roentgenographic evidence for cancer localization. The remaining 19 patients were referred to the Mayo Clinic for localization of their tumor. Screening included sputum cytology, chest x-ray, and a lung health questionnaire, which was repeated every four months. Patients with positive cytology were submitted to detailed bronchoscopy. Repeated bronchoscopy was necessary in 11 patients to detect the primary site. Twenty-seven patients were treated for lung cancer, 22 in Stage I and five in Stage III. Sanderson and Fontana acknowledged that survival data was limited, but may have been improved because of intervention in the pre-symptomatic interval.

Ann Otol Rhinol Laryngol 84: 583-588 (Sept/Oct) 1975 CWN

PRIMARY LUNG CANCER

was studied in two separate, but integrated therapeutic trials between May, 1963 and December, 1966, in 17 medical centers to determine the effect of preoperative radiotherapy. Warram of the Harvard School of Public Health in Boston, along with a group of collaborating investigators, reported that from the results of their investigation there was no evidence to indicate that supervoltage irradiation, given preoperatively, favorably influenced the five-year survival rate. On the other hand, preoperative irradiation was not found to have an appreciable adverse influence on the course of the disease either. The proportion of cancers that could be resected was not found to increase, nor was the proportion of patients who had recurrence of cancer decreased.

Cancer 36: 914-925 (Sept) 1975 SO

A PULMONARY METASTATIC FOCUS

that responded to intralesional BCG therapy was documented for the first time in a 77-year-old man with 64 intracutaneous melanoma metastases and a pulmonary metastatic deposit. During an eight-month period, 17 intracutaneous lesions were inoculated with BCG. Mastrangelo et al of the Malignant Melanoma Clinical Cooperative Group reported that all 17 injected lesions and all 47 uninjected intracutaneous lesions resolved, no nodules appeared, and the pulmonary metastasis regressed (>50%).

Cancer 36: 1305-1308 (Oct) 1975 SO

BREAST



CHEMOTHERAPY AFTER MASTECTOMY was the subject of a letter to the editor in which several years of varying practices of adjuvant chemotherapy were examined in a single surgeon's practice. Donovan et al reported their data from Queen Elizabeth Hospital and the Birmingham Regional Cancer Registry in England. Because of the poor survival for breast cancer after surgery alone, several imaginative adjuvant studies are currently being conducted (see an excellent review in Cancer 36: 881-892 (Sept) 1975). This current data from Donovan et al has the advantage of providing survival data that is presently missing in the early interpretations of encouraging remission-free data of other ongoing studies. Although not a prospective trial, this letter was interesting in that it detailed statistically significant improvement in survival for the period of one surgeon's practice when he was giving cytoxan for four to six months to all patients undergoing mastectomy. The patients without axillary node involvement were found to do better with the drug. This result contrasts with the preliminary results of remission-free intervals in other ongoing studies where women with positive nodes were found to show improved results on adjuvant chemotherapy. There was one discrepancy in the two tables accompanying this letter and the authors should clarify this before too much significance can be attached to this otherwise most interesting report.

Lancet I: 42 (Jan 3) 1976 Ronald L. Stephens



PREOPERATIVE BONE SCANS

(strontium nitrate Sr 87m) were found to be abnormal in 9% (3) of 35 women with early breast cancer who were tested by Charkes et al of Temple University Medical School and Hospital in Philadelphia, Pennsylvania. No clinical or roentgenographic spread was apparent in any of the patients studied. The authors reported that, of the three patients who had abnormal scans, all had extensive axillary lymph node involvement by their tumor and all subsequently developed additional bone metastases from which one patient died. In all three patients, roentgenograms failed to detect metastases. The authors suggested that occult bone metastases may have been partly responsible for the failure of radical mastectomy to cure some breast cancer patients. It was recommended that preoperative bone scans be conducted on all patients scheduled for radical mastectomy.

JAMA 233: 516-518 (Aug 11) 1975 SO




ADVANCED MAMMARY CANCER


treated with bilateral adrenalectomy in 583 patients over a period of 21 years was evaluated by Silverstein et al from California. The operative (30-day) mortality rate was approximately 5%. Thirty-six per cent of patients responded favorably for at least six months. Factors that favorably influenced response included: 1) older patients, age 51-65 years (41%); 2) a prior favorable response to oophorectomy (40%); 3) a disease-free interval after mastectomy of over 2 1/2 years (50%); 4) metastases to a single visceral organ or in combination with bone or soft tissue (39%). Responders to adrenalectomy survived an average of 26 months; non-responders only 10 months. The authors noted that the new assays of tumor for estrogen-binding sites should improve the selection of patients for endocrine-ablative procedures and that the addition of chemotherapy appears to improve the incidence of favorable responses.

Surgery 77: 825-832 (June) 1975 SRF


HEENT

 **HEAD AND NECK CANCER** was reviewed with respect to the importance of immunosuppression by Penn of the University of Colorado School of Medicine and the Veterans Administration Hospital in Denver. According to the author, the high incidence of cancers arising in patients who have had immunosuppression therapy associated with organ transplantation appear to justify this fact. The increased incidence of cancers in transplant patients has also been noted in patients who were immunosuppressed for a variety of certain and uncertain causes. In the head and neck, these neoplasms appear to have predilection to arise in the skin of the face, particularly the lower lip. The author emphasized that the modes of treatment in primary neoplasms of the head and neck, namely surgery, radiation and chemotherapy, may also be responsible for crippling the host's immune defense mechanisms. It was therefore suggested that the methods of cancer therapy be reappraised and their effects on the patient's resistance to his neoplasm be re-examined.

Arch Otolaryngol 101: 667-670 (Nov) 1975 FRK


 **IN LARYNGEAL CARCINOMA**, stomal recurrence after laryngectomy is one of the most serious complications of treatment. The two most important causative factors are preoperative tracheostomy and subglottic involvement by the original lesion. Once established, the prognosis is grave. While limited palliation has been reported with the use of radiation and chemotherapy, Bonneau and Lehman of the Medical College of Wisconsin in Milwaukee and the Spokane Ear, Nose and Throat Clinic in Washington reported that extensive resection presently offers the best chance of cure. It was suggested that prophylactic measures such as avoiding a preliminary tracheostomy, meticulous paratracheal dissection, and microscopic control of the resected margins of the surgical specimen may reduce the incidence of peristomal carcinoma.

Arch Otolaryngol 101: 408-412 (July) 1975 FRK


 **CARCINOMA OF THE LARYNX**—voice rehabilitation after laryngectomy using the Northwestern voice prosthesis was described by Sisson et al from the Northwestern University-McGaw Medical Center in Chicago. The prosthesis, which has no vibrator, transports air from the tracheostoma to a fistula in the neck, well away from the major blood vessels, thereby activating vibrations of the patient's

pharyngeal or upper esophageal tissues. Fitting directly onto the laryngectomy tube and allowing the patient to breath, speak, and cough without any manual adjustments, the prosthesis can be used by primary total laryngectomies while learning esophageal speech. It can also be installed in those patients who are unable to use the electronic larynx or learn esophageal speech.


Arch Otolaryngol 101: 178-181 (Mar) 1975 FRK

 **SQUAMOUS CARCINOMA OF THE LARYNX** in 119 patients who were compared to an equal number of controls as to exposure to asbestos was studied by Stell and McGill of the Liverpool Ear, Nose and Throat Infirmary in England. Smoking habits were also compiled. Asbestos exposure was found to occur in 27.7% of the patients with laryngeal carcinoma as compared to only 2.5% in the controls ($p < 0.001$). Smoking was much more significant in this patient group and may have accounted for this difference. The authors concluded that tobacco smoke and asbestos may act synergically.

J Laryngol Oto 89: 513-517 (May) 1975 CWN

 **CARCINOMA OF THE NASOPHARYNX** was evaluated for the effectiveness of retreatment of locally recurrent disease by Fu et al from the University of California at San Francisco. Sixty-nine per cent of the recurrences appeared within three years and 83% within five years after initial treatment. The survival rate was 41% at five years after the first recurrence and survival rates increased proportionately with increasing time between the initial treatment and the recurrence. Patients with extension beyond the nasopharynx, invasion of the base of the skull, cranial nerve palsies, and distant metastases who did not receive further treatment locally were excluded from this study (42 patients). Only nine patients developed soft tissue or bone necrosis. Fourteen of a total of 42 patients studied are alive without evidence of disease. Of the 25 patients who died, 23 died of their nasopharyngeal cancer. Neck node recurrence was managed with radical neck dissection.


Radiology 117: 425-431 (Nov) 1975 DFP

 **"SMOKERS' LARYNX"** and carcinoma of the larynx were studied in an inbred strain of Syrian hamsters that were exposed to cigarette smoke twice a day, five days a week for two years. Appropriate controls were analyzed by Homburger of the Bio-Research Institute in Cambridge, Massachusetts, who reported that in 49 larynges examined histologically, no pathology was found in controls. Epithelial abnormality was seen in 40% of the


smoke-exposed animals and 19% of microinvasive cancer after 76 days of exposure.

Laryngoscope 85: 1874-1881 (Nov) 1975 CWN


BONE

 **OSTEOGENIC SARCOMA** therapy has served as a model for evaluation of new ideas in methotrexate administration. Frei et al of the Children's Hospital Medical Center in Boston described increased effectiveness and safety in a protocol of vincristine I.V., followed in 30 minutes by methotrexate at 100 times the usual dosage with citrovorum factor rescue. The citrovorum factor is given in larger than usual doses every six hours for 72 hours. Preservation of bone marrow function then permits the addition of adriamycin to the regimen. Reversible nephrotoxicity from the large methotrexate dose has been observed and can be a limiting factor in that it keeps methotrexate blood levels high for a prolonged period, necessitating prolongation of citrovorum rescue. Creatinine clearance above 75% of normal is, therefore, a prerequisite to this regime. Combinations of this regime with thymidine are under study and show promise.

N Eng J Med 292: 846-851 (Apr 17) 1975 FAA


 **OSTEOGENIC SARCOMA** was treated with the four-drug adjuvant chemotherapy regimen CONPADRI-I (cyclophosphamide, vincristine, melphalan, and adriamycin, in defined combinations administered intermittently over a 72-week period) in 18 children studied by the Southwest Oncology Group. All patients had surgical amputation of their primary lesion. Sutow et al reported that 55% (10) of the patients remained disease-free for 24 months or longer from time of amputation. After reviewing their data, the authors proposed that it now appears that adjuvant chemotherapy has improved prognosis for patients with osteogenic sarcoma.

Cancer 36: 1598-1602 (Nov) 1975 SO


 **IN EWING'S SARCOMA**, serum lactate dehydrogenase level before treatment was found to be a useful prognostic indicator of future metastatic spread. In a study of 36 patients with this disease, Brereton et al of the National Cancer Institute in Bethesda, Maryland, reported that three of 18 patients with serum levels ≤ 201 IU/litre ultimately developed metastases, while 16 of 18 patients who presented with serum levels of ≥ 214 IU/litre developed metastases ($p < 0.001$).

Ann Int Med 83: 352-354 (Sept) 1975 KPZ


GUT

 **A HEPATOMA**, relatively avascular, that was associated with anabolic steroid therapy was reported by Holder et al from The Radioisotope Laboratory, Cincinnati General Hospital in Ohio. The patient was a child who developed an acquired hypoplastic anemia at the age of five and, over the course of the next 50 months, was given prednisone and various anabolic steroids. Alpha-fetoprotein examinations were negative. A Tc^{99m} sulfur colloid liver scan was obtained because of the possibility of liver abscess. The static liver scan showed a relatively avascular mass located in the liver. The inability of the dynamic flow study to demonstrate increased bloodflow incorrectly suggested the presence of either an abscess or fibrotic pseudotumor. There have been ten patients reported with anabolic steroid-induced hepatomas and, of the ten, eight have had liver scans. Five of these eight patients have had abnormal liver scans and the diagnosis of a focal disease of the liver could be made on the static liver scan.

Am J Roentgenol Radium Ther Nucl Med 124: 638-642 (Aug) 1975 DFP

 **COLONIC CANCER** incidence had a positive correlation with increasing socioeconomic status according to an intensive survey of cancer of all sites conducted in Omaha-Douglas County, Nebraska, during 1964. Lynch et al from the Creighton University School of Medicine in Omaha used multiple sources of data to calculate an exponentially rising risk of colon cancer as a function of mean yearly income of the 72 census tracts in the county. In simple terms, this means that a person residing in a tract with the highest mean income had a 2.5 times higher risk of developing colon cancer than one living in the lowest income area. Some anomalies appeared, however, when the data was expressed as an age-corrected incidence as the lowest income tracts ranked second in incidence to the highest, thus raising questions concerning the meaning of the statistical manipulations. [Abstracter's Note: Data gathering must have been difficult in this study as no central tumor registry existed in either the county or the state and only one hospital in the area had its own registry.]


Am J Epidemiol 102: 119-127 (Aug) 1975 WKG

 **GASTRIC CARCINOMA** in 2,590 patients collected over a 27-year period who were incorporated into a regional study in Finland was reviewed by Inberg et al from the University of Turku. After


chronologically dividing the cases into three groups, the authors compared the earliest group to the most recent group and found: 1) the total nonresected patients dropped from 46% in group one to 20.7% in group three; 2) the percentage of patients who received total or proximal gastrectomy rose from 0.9% to 23%; and 3) resectability rose from 21.1% to 45.1%, respectively (the most distinct improvement noted in carcinoma of the cardia). Operative mortality for proximal or total gastrectomy was reported to be approximately 16% and the cure rate for distal gastrectomy was 4.8%. Curative subtotal gastrectomy 5-year survival rose from 23% in the first period to 43% in the third and, for total or proximal gastrectomy, the figure increased from 0% (only nine cases were operated on during this period) to 30% in the latter period. The authors concluded that despite the higher primary mortality, the prognosis for carcinoma of the cardia is as good as that for carcinoma of the antrum.

Arch Surg 110: 703-707 (June) 1975 SO

GENITOURINARY


 **ENDOMETRIAL CARCINOMA** as related to the administration of estrogen was the subject of two articles (Ziel and Finkle of the Kaiser Permanente Medical Center in Los Angeles and Smith et al from the University of Washington in Seattle). It was concluded in both articles that endometrial cancer risk is approximately 4.5 times greater among the estrogen users. Smith et al noted that those women having characteristics previously associated with a higher incidence of this cancer (hypertension, obesity, and nulligravidity) did not show as great an increase in incidence with estrogen use as did "normal" women. This study did not address itself, however, to dosage or duration of treatment as factors in association with cancer.

N Eng J Med 293: 1164-1167, 1167-1170 (Dec 4) 1975 FAA


 **PLACENTAL CHORIOCARCINOMA** geographical segregation is inadequately understood. In addition to the various predisposing factors (hydatidiform mole, childbearing at an advanced age, ethnic background, etc.) the ABO group of the patient and the male partner has recently emerged as an important determinant of the incidence of the disease (e.g. group A mother is at a higher risk if the husband is O rather than A). Accordingly, this article suggested that a more extensive study of the genetic

and environmental factors and their interactions in endemic areas may shed light on the unique distribution of the disease.


BMJ 3: 606-607 (Sept 13) 1975 MA

 **METASTATIC TROPHOBLASTIC DISEASE** and nonmetastatic trophoblastic disease treated with actinomycin D were found to have a 94% and 67% remission rate, respectively. Within the metastatic group, a 76% remission rate was achieved without choriocarcinoma and a 56% remission rate with choriocarcinoma. According to Osathanondh et al of the New England Trophoblastic Tumor Service in Boston, actinomycin D was shown to be as effective against gestational trophoblastic disease as methotrexate and with the benefit of being less hepatotoxic and crossing the blood brain barrier.

Cancer 36: 863-866 (Sept) 1975 DVH

 **CARCINOMA OF THE CERVIX** in 36 patients with positive para-aortic lymph nodes (by lymph node scan, lymphangiogram, and/or biopsy) and who received 5000 rads to the para-aortic area were evaluated by Lepanto et al from The Hospital of the University of Pennsylvania at Philadelphia. Para-aortic radiation was associated with a 19.5% severe complication rate and 5.5% mortality rate. Due to the low increase in survival and the high incidence of complications, prophylactic para-aortic radiation was not considered to be beneficial. The authors suggested that routine lymphangiography be done to evaluate lymph node metastases and, if radiation is contemplated, a tissue diagnosis is required to justify the high morbidity and mortality associated with radiation. Some patients with positive para-aortic nodes can attain a five-year survival with radiation therapy.

Cancer 35: 1510-1513 (June) 1975 DVH

 **CERVICAL CANCER** mortality data in Denmark were retrospectively studied (1961-1971) to see if defined age, marital, geographic, and employment groups could be identified as having high death rates. Grunfeld et al from the Danish Institute for Clinical Epidemiology in Copenhagen used these data to direct systematic screening and follow-up programs to maximize detection and to minimize the number examined. The computerized number-game indicated that 30- to 40-year-old, divorced, non-skilled, industry-employed women deserve particular attention. While the technique was well-illustrated, results obtained failed to help identify groups "at risk" for developing cervical cancer. It was suggested that

information more useful in directing identification on programs might be obtained from at risk (incidence) rather than mortality data.

Am J Epidemiol 101: 265-275 (Apr) 1975 WKG



INVASIVE CERVICAL CARCINOMA

in 231 consecutive cases at a community hospital was studied by Pardanani et al of Ellis Hospital in Schenectady, New York, in an effort to determine whether community hospitals can participate in clinical cancer studies. The authors summarized the most important factors in the prognosis of cervical cancer as being stage of the disease; clinical experience of the oncology team; and technical capability of the institution; early detection offering the best results. The authors reported a relative 5-year survival of 57%, a figure that compared favorably to previously reported series. Overall results indicated that treatment for early cervical carcinoma in community hospitals was comparable to that in cancer centers, although results for advanced cases appeared better in the cancer centers. The authors concluded that programs can be developed to enhance the communication and cooperation between the cancer centers and community hospitals, thereby improving the quality of care for patients with cervical cancer.

NY State J Med 75: 1018-1021 (June) 1975 SO



EXTRAPERITONEAL PARA-AORTIC NODE DISSECTION

a surgical technique for exploration and biopsy, was described by Schellhas of the University of Cincinnati College of Medicine in Ohio. This procedure was developed in order to circumvent the complication of severe gastrointestinal problems encountered when transperitoneal exploration was done followed by extended radiation therapy. The technique for avoiding damage to blood and nerve supply to the rectus muscle is well described. Twenty-two patients were thus evaluated without subsequent problems when radiation followed exploration. It has been suggested that this approach might also be utilized for para-aortic node dissection in ovarian carcinoma.

Obstet Gynecol 46: 444-447 (Oct) 1975 RGS



PROSTATE CARCINOMAS (Stages B-D)

in 51 patients who underwent control aspiration biopsy after hormonal therapy using the Franzen needle were studied by Rost et al from Free University in Berlin, West Germany. Cytological findings were compared with the histological grade of the tumors (divided into one of three grades) and the clinical course. Concomitantly, the karyopyknotic index, determined by swabs from the urethral fossa

navicularis, was measured to determine the serum estrogen level. The authors reported that as a result of the anti-androgenic therapy, degenerative changes in the tumor cells were evident. Results further indicated that when the histologic differentiation of the tumor was poor, the cytological change was even poorer. Six of 34 patients studied who had good hormonal effect were reported to have tumor progression, while 16 of 17 patients who had poor hormonal effect had clinical progression. Agreement between the clinical course and the karyopyknotic index was apparent in 70% of the cases. No correlation was found between the karyopyknotic index and the histological grade of the tumor.

Urol Int 30: 245-254, 1975 SO



PROSTATE CANCER

complicated by ureteral obstruction was reviewed by Khan and Utz from the Mayo Clinic. Thirty-four patients were seen in 10 years: about half of these having no previous treatment of their tumor. Twenty-five of these patients were treated aggressively. Treatment modalities included orchiectomy, estrogen therapy, hemodialysis, nephrostomy, transurethral resection to unroof obstructed ureteral orifices, and irradiation. Overall one-year survival exceeded 50% and was twice as frequent in the previously untreated group compared with those with earlier treatment.

J Urol 113: 816-819 (June) 1975 JDF



CARCINOMA OF THE PROSTATE

treated by total perineal prostatectomy in 213 patients with Stage C lesions was reported by Schroeder and Belt from Wurzburg, West Germany and Los Angeles, Calif., respectively. Survival was significantly lower than for another group of 132 patients with Stage B tumor and also significantly lower than that calculated from actuarial life tables modified for chronically ill patients. Local recurrence was discovered in 13%, distant metastases in 23%, and eventual death due to recurrent disease in 30%. These factors were all strongly dependent on the grade of the tumor. Many of the patients also received hormonal treatment.

J Urol 114: 257-260 (Aug) 1975 JDF

BRAIN



MENINGIOMAS

are frequently responsive to total resection. In a review of a ten-year series of these tumors, treated and untreated, at the Royal Perth Hospital in Western Australia, Shaffi and Lekias found that 18 out of 78 cases studied were diagnosed at autopsy;

ten of these having had neurological symptoms and signs present during life. When this figure was associated with the estimated incidence in the total population, the authors postulated that it appears that only one-third of all cases with neurological effects due to meningioma come to operation during life. After comparing the results of this series to previous literature with respect to the overall clinical picture, the authors suggested that, in cases of gradual psychological deterioration, the presence of a benign intracranial space-occupying lesion ought to be excluded.

Med J Aust 1: 589-594 (May 10) 1975 SO



ASTROCYTOMAS treated between 1942 and 1967

at the University of California in San Francisco were reviewed by Leibel et al in an effort to ascertain the role of radiotherapy in the management of these tumors. Of a total of 147 patients found to have astrocytomas, 25 were reported to have died post-operatively, 14 thought to have had their tumors completely removed were not irradiated; and 108 patients had incomplete resections, 71 of whom received irradiation. All of the 14 patients who had complete resection survived five years or longer, while those with incomplete resections had five-year survivals of 19% for the non-irradiated group compared to 46% for the group receiving irradiation. Based on observations covering a follow-up period up to 20 years, the authors concluded that post-operative irradiation after incomplete resection significantly prolonged useful life and may have led to permanent control in some cases. No evidence of radiation damage was noted.

Cancer 35: 1551-1557 (June) 1975 SO



BRAIN TUMORS in the pediatric age group

were evaluated for accuracy of brain scanning by Gilday and Ash from The Hospital for Sick Children in Toronto, Ont., Canada. A total of 2,563 children were studied by a radionuclide flow study, immediate post-injection blood-pool imaging, and delayed two- and four-hour brain imaging. Ninety per cent of 110 new neoplasms of the brain or skull were detected. Positive brain scans were produced by 39 recurrent tumors not studied previously. Approximately 50% of the 2,563 children were studied to determine whether a tumor was present. The authors concluded that brain scanning is a sensitive and accurate method to determine the presence or absence of a brain tumor in the pediatric population.

Radiology 117: 93-97 (Oct) 1975 DFP

BLOOD



CHRONIC MYELOID LEUKEMIA

studied for acute transformation in 45 patients was found to have an average duration of the chronic phase of 38 months and a very short acute phase, which did not exceed seven months. Duhamel et al of the Hospital Saint-Antoine in Paris, France, reported that the clinical signs that indicated acute exacerbation were, in order of importance: increase in the volume of the spleen, changes in general health, and fever. The blood signs, often found later than clinical signs, were increased white cell count, anemia, and marrow leukoblastosis higher than 20%. Laboratory criteria of acute exacerbation were found to be of lesser importance. Chemotherapy gave very poor results at this stage.

Sem Hop Paris 51: 2445-2449 (Oct 16) 1975 SO



ACUTE MYELOID LEUKEMIA

in 18 children from the Royal Manchester Children's Hospital in Manchester, England, was treated with a four-drug protocol using cytosine arabinoside, daunorubicin, prednisolone, and mercaptopurine or thioguanine. Evans et al reported that the overall initial remission rate was 78% and, of 15 children who completed a week's treatment (one complete cycle), 93% (14) entered complete remission. Median survival was seven months and median survival for those who entered remission was 12½ months.

Cancer 36: 1547-1551 (Nov) 1975 SO



ACUTE NONLYMPHOCYTIC LEUKEMIA

in an adult cluster in the small village of Elmwood, Wisc., and its rural areas was studied by Bartsch et al from the University of Minnesota at Minneapolis. From 1970 to 1973, seven cases represented a remarkable and statistically unlikely event; cell-type-specific incidence being 15 to 20 times higher than the expected incidence. Various interpersonal and occupational connections were found among most of the seven patients studied.

JAMA 232: 1333-1336 (June 30) 1975 CL



CHRONIC GRANULOCYTIC LEUKEMIA

in 32 patients was treated by elective splenectomy during the chronic phase of the disease. Previous reports had suggested three potential benefits of the operation: 1) possible induction of long remission; 2) delay in onset of blastic transformation; and 3) less difficult management of the patient in blast crisis, particularly with regard to elimination of splenic pain and increased transfusion requirements. According to the results of this study, only the third premise proved to be true. Ihde et al from

the National Cancer Institute in Bethesda, Maryland, therefore concluded that prophylactic splenectomy in the chronic phase of the disease did not influence survival, but may ameliorate some complications of the terminal stages of illness.

Ann Int Med 84: 17-21 (Jan) 1976 KPZ



ACUTE IDIOPATHIC MYELOFIBROSIS

is rare in children though secondary myelofibrosis is not uncommon with acute leukemia. Of 25 children with the idiopathic form reported in the literature, four had Down's syndrome. Evans of the Royal Manchester Children's Hospital in England reported two of these cases. Both children were noted to be anemic, one at 18 months and the other at 21 months. Survival was two and 11 months, respectively. Both children had a clinical picture of acute leukemia, but bone marrow biopsy on one and necropsy bone marrow study on the other revealed a bizarre pattern, including generalized fibrosis. The author suggested instability in the control of bone marrow proliferation as one of many hemopoietic disturbances associated with Down's syndrome.

Arch Dis Child 50: 458-462 (June) 1975 GEH



MULTIPLE MYELOMA

patients show impaired synthesis of polyclonal immunoglobulins and are, therefore, more subject to infection. Broder et al from the National Cancer Institute in Bethesda and Johns Hopkins University in Baltimore reported that analyses of IgM, IgA, and IgG in normal people and myeloma patients show marked differences which can be attributed to "suppressor" cells that decrease the ability of B lymphocytes to secrete immunoglobulins. The T lymphocytes apparently do not participate significantly in this phenomenon. Some B lymphocytes cannot undergo the transition into immunoglobulin-producing cells and, when cocultured with normal lymphocytes, they suppress normal immunoglobulin activity also. There is evidence that the suppressor cell is a monocyte. From this study, the authors expressed a hope that a new therapeutic approach to severe depression of humoral immunity may evolve.

N Eng J Med 293: 887-892 (Oct 30) 1975 FAA



HISTIOCYTOSIS X

was treated by Lahey at the University of Utah at Salt Lake City in 83 children under 15 years of age using one of three treatment regimens: vinblastine alone, prednisone plus vinblastine, and prednisone plus 6-mercaptopurine. Sixty-five children were under two years of age and 18 were over two years. The three treatment regimens were almost

equally effective in causing complete or good remission in these children. Results indicated that failure of response to one regimen probably will result in unlikely response to another. In spite of the general assumption that histiocytosis X carries with it a high mortality rate, the majority of patients in this study (59 [71%] are living). Forty-four of these are under two years of age and 15 are two and older. Some survivors had relatively minor disabilities.

J Pediatr 87: 179-183 (Aug) 1975 GEH



HODGKIN'S DISEASE

treated with radiation therapy was reported by Peckham et al who studied 212 patients from the Lymphoma Unit of the Royal Marsden Hospital in England. Sixty per cent of patients with Stage I or Stage II Hodgkin's disease treated between 1963 and 1973 remained free of disease following treatment. Patients with multiple node disease, especially with infraclavicular nodes, had a particularly high rate of relapse. Such patients were also likely to have the nodular sclerosing form of Hodgkin's disease. Of 78 patients treated with radiation therapy and splenectomy, 80% remained in complete remission. The results of treatment for the nodular sclerosing form of disease were similar to those patients having a mixed cellularity pattern of disease. The authors suggested that splenic involvement by Hodgkin's disease does not necessarily mean that invasion of liver or bone marrow has occurred. They proposed that if the spleen and nodes of the porta hepatis are involved, there is an increased risk of liver involvement.

Brit J Cancer 32: 391-400 (Sept) 1975 DJS



REED-STERNBERG CELL STRUCTURE

was discussed along with a brief review of the history of the concepts surrounding Hodgkin's disease by Azar of the University of South Florida College of Medicine in Tampa. According to the author, the presently accepted description of the ultrastructure of the Reed-Sternberg cell is that it is a poorly differentiated lymphoreticular cell with an uninterrupted membrane connecting two lobes of the nucleus. The Reed-Sternberg cell may represent the end stage of a transformed lymphocyte that has undergone *in vitro* blastogenesis. It is not definitely established that it is a histiocyte. Descriptions of cellular kinetics have indicated that the smaller and medium-sized lymphocytes have the largest thymidine labeling index. The Reed-Sternberg cell continues to be an essential landmark for the diagnosis of Hodgkin's disease.

Hum Pathol 6: 479-484 (July) 1975 REL

OTHER



MALIGNANT PLEURAL EFFUSIONS have been detected by ^{99m}Tc -diphosphonate bone scans. Siegel et al from Malcolm Grow USAF Medical Center, Andrews Air Force Base in Washington, D. C., noted that technetium-99m-diphosphonate (used for bone scanning) accumulated in malignant pleural effusions in two patients. The accumulation of the radiolabel in the chest occurs not only in malignant pleural effusions, but may occur in metastatic and primary cancers of the chest and following chest wall radiation. The radiolabel was found in the cell-free component of the pleural effusion. Thus, bone scan may be abnormal because of non-osseous pathology.

J Nucl Med 16: 883-885 (Oct) 1975 DFP



RADIOISOTOPE BONE SCANNING, the most frequent and sometimes sole diagnostic test for bone cancer, was discussed by Loeffler et al of the Northeast Ohio Conjoint Radiation Oncology Center (NEORAD). Limitations of bone scanning in clinical oncology were reviewed and radioisotope bone scans were compared to roentgenographic bone surveys. Although bone scans were found frequently to appear more sensitive than roentgenogram bone surveys in the detection of metastatic bone disease, they also appeared more limited in evaluating changes in abnormal bone structures. The authors cautioned that because false-negatives and false-positives do occur, all results should be interpreted with caution. It was concluded that both radioisotope bone scans and roentgenogram bone surveys should be obtained for initial screening and subsequent evaluation of bone metastases.

JAMA 234: 1228-1232 (Dec 22) 1975 SO



RADIATION THERAPY resulting in dental anomalies may be anticipated by a comprehensive dental radiographic survey performed prior to radiation of the head or neck according to Guggenheimer et al from the University of Pittsburgh School of Dental Medicine in Pennsylvania. Teeth are most sensitive to radiation prior to histodifferentiation and the onset of calcification of the tooth bud. Once calcified, the teeth are no longer susceptible to the direct effects of irradiation. The anomalies produced following radiation vary with the age of calcification attained at the time of irradiation. It is possible to predict which teeth will be damaged and to what extent. Permanent teeth

are not completely calcified until 15 or 16 years of age and therapeutic irradiation of the head or neck at any time prior to this is likely to produce malformation and developmental arrest of the noncalcified teeth. Even the most severely malformed teeth are capable of eruption. The authors recommended a stringent oral hygiene program including daily topical fluoride applications in combating the development of radiation caries.

Radiology 117: 405-406 (Nov) 1975 DFP



ACUTE LETHAL CARDITIS caused by high-dose combination chemotherapy was the subject of a report by Appelbaum et al from the National Cancer Institute in Bethesda, Maryland, and Washington University School of Medicine in St. Louis. Four patients under the age of 20 who suffered from a variety of malignant diseases, and who developed acute fatal myopericarditis after high-dose cytoxan were described. All patients had received a combination of cytotoxic agents prior to high-dose cytoxan and two of the four had received a known cardiotoxic drug, daunorubicin. Necropsy revealed fibrin microthrombi in capillaries, fibrin strands in the interstitium, and fibrin strands within the heart-muscle cells. Cytoxan is frequently used in combination with a known cardiotoxic drug, adriamycin, and this report serves to remind physicians of the potential increase in cardiomyopathies when cytoxan is a portion of any treatment program.

Lancet 1: 58-62 (Jan 10) 1976 RLS



RELATIONSHIP OF CANCER to the aging process was investigated by Peto et al from London, England. After noting previous epidemiological studies that showed the relative risk of cancer as 50 times greater at age 65 than at 25, the authors decided to pursue this observation experimentally by applying a carcinogen (benzpyrene) to the skin of four groups of 950 mice. The carcinogen was started at 10, 25, 40 or 55 weeks of age. Incidence of malignant epithelial tumors was associated with duration of exposure. The authors suggested that, in man, the increased incidence of malignant tumors with age appears to exist merely because age equals increased duration of exposure. No intrinsic effects of aging such as altered hormonal status or diminished immune surveillance need be invoked to explain the higher incidence of malignant disease in older individuals.

Br J Cancer 32: 411-426 (Oct) 1975 DJS



MICROCYTOTOXICITY ASSAYS FOR TUMOR IMMUNITY were tested in peripheral blood

lymphocytes from patients with a chogenic carcinoma by Pierce and DeVald of the University of Kansas Medical Center. The authors suggested that the most direct technique of measuring the anti-tumor activity of lymphocytes in cancer patients was to mix the lymphocytes directly with cultured tumor cells and measure killing. The previous problem with this type of direct cellular cytotoxicity assay has been the high incidence of "non-specific killing" of tumor cells by lymphocytes. In this carefully controlled study, the authors were able to sort out "non-specific killing" and apparent tumor specific activity. Lymphocytes from patients who had successfully undergone resection for lung cancer appeared more toxic against bronchogenic tumor cells than did lymphocytes from normal donors or from patients with clinically evident disease. These results fit two commonly regarded truths in tumor immunology: 1) Tumors have tumor specific antigens capable of provoking specific responses and 2) Patients with extensive disease lose their capability to respond specifically or non-specifically.

Cancer Res 35: 3577-3584 (Dec) 1975 WRJ



INCIDENCE OF MALIGNANCY IN DERMATOMYOSITIS appears to be five to seven times that of the general population. In a review by Barnes of the Bryn Mawr Hospital in Philadelphia, Pennsylvania, the distribution of tumors in patients with dermatomyositis differed significantly from that of the general population, with tumors of the ovary and stomach being found more commonly and colorectal malignancies underrepresented.

Ann Int Med 84: 68-76 (Jan) 1976 KPZ



INHIBITION OF DNA SYNTHESIS by cannabinoids was the subject of a paper by Carchman et al of the Medical College of Virginia in Richmond. While good deriving from bad is not a particularly novel concept, in this report good (anti-cancer activity) is reported to be derived from bad (marijuana smoking). It appears that a class of chemicals known as cannabinoids found in marijuana smoke have definite in vitro anti-cancer activity. In this particular report, a specific effect, i.e., inhibition of DNA synthesis in three different tumor systems is reported. It is presumed that anti-tumor activity can be explained by this effect. Future studies will be directed at further modifications of the cannabinoid ring structures to gain more anti-tumor activity.

Cancer Res 36: 95-100 (Jan) 1976 WRJ

Letter from the Editor:

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As CANCER CONTROL FOR THE PROFESSIONAL will soon be celebrating its second birthday, we are now launching an evaluation campaign in an attempt to assess the journal's impact on its audience.

During the past year and a half of publication, CANCER CONTROL FOR THE PROFESSIONAL has experienced tremendous growth due to the generous support of the American Cancer Society-Kansas Division and the Mid-America Cancer Center Program. The journal has gone from a four-page quarterly to an eight-page bimonthly newsletter. The circulation has grown from the initial mailing of 3,200 to over 5,000 copies now mailed to physicians, osteopaths, residents, interns and students across Kansas and Western Missouri.

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Sincerely,
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DEPARTMENT OF HEALTH AND ENVIRONMENT



OBJECTIVES:

THE CANCER DATA SERVICE, WHICH PROVIDES FREE
 COMPUTERIZED DATA PROCESSING TO ITS PARTICIPATING
 PHYSICIANS AND HOSPITALS, SEEKS TO SERVE THE MID-
 AMERICA REGION BY ACCOMPLISHING THE FOLLOWING
 OBJECTIVES:

- 1) REGISTER all cancer patients in the geographic area served.
- 2) ASSIST each hospital in the establishment and maintenance of an approved cancer registry.
- 3) ACHIEVE a high percentage of annual follow-up for registered cancer patients by providing participating hospitals and physicians with monthly reports, physician letters, hospital letters, and a locator service for lost patients.
- 4) PROVIDE monthly, annual and special cancer patient reports to all hospitals and physicians in the region, giving them meaningful analyses of their cancer data.
- 5) MAINTAIN an accurate up-to-date data base of cancer incidence, diagnosis and treatment to assist in the education of physicians, medical and nursing students, other health science students, other medical personnel, and the general public.
- 6) IDENTIFY problems in cancer control in the region and provide a data base for effective planning of facilities for the care of cancer patients.

WHITE MARSHA 0109002 0450226-01 1509 10/1
 BOX 267 8147
 JOHNSON CITY KS 67888 PHONE 913-555-1121 90

SERVICES PROVIDED:

THE CANCER DATA SERVICE PROVIDES THE FOLLOWING SERVICES TO HOSPITALS AND PHYSICIANS IN THE REGION:

- 1) Computerization of cancer case data.
- 2) Auditing of records and quality control.
- 3) Monthly reports that list each cancer patient due for an annual follow-up (sent to the physician and cancer registries involved in that patient's care).
- 4) Carefully designed patient abstract and follow-up forms.
- 5) A developed coding and information manual.
- 6) Training of unit personnel and management of workshops for participating institutions.
- 7) Periodic, statistical and special reports.
- 8) Data on incidence, morbidity and mortality of cancer.
- 9) Protection of the right of privacy of personal data for cancer patients.

In all instances, the cancer case data entered into the Cancer Data Service files are confidential and available only to the patient's physician and the cancer registries concerned in that patient's care. Aggregate patient data minus identifying information for individual patients, will be available to bona fide researchers at the discretion of the director of the Cancer Data Service.

HISTORY:

The Cancer Data Service was created in 1969 to serve as a centralized cancer registry for the state of Kansas to enhance cancer education and patient care. Originally called the Kansas Cancer Information Service, the Cancer Data Service was designed to act as a coordinating facility for cooperating tumor registries throughout Kansas, and was responsible for the collection, evaluation, and disbursement of defined information on cancer patients.

A computerized data processing system was implemented to provide participating hospitals and physicians with the means of evaluating cancer data from their areas. The

Kansas Cancer Information Service began computer conversion of existing files of cancer patients in July, 1972. As of February, 1976, more than 50,000 cases have been entered into the system and this figure is expected to increase annually by about 5,000 cases.

The Kansas Cancer Information Service was renamed the Cancer Information Service in August, 1973, to connote its expansion from a Kansas registry to a regional research and information service. The title was readjusted again in January of 1976 to focalize on its data processing services, thus becoming the Cancer Data Service.

STAFF:

Five persons are employed full-time for the Cancer Data Service. Their positions are:

COORDINATOR FOR AFFILIATED HOSPITAL REGISTRIES who acts as a liaison between the participating hospitals and the Cancer Data Service, and who oversees the quality control and training of hospital registrars.

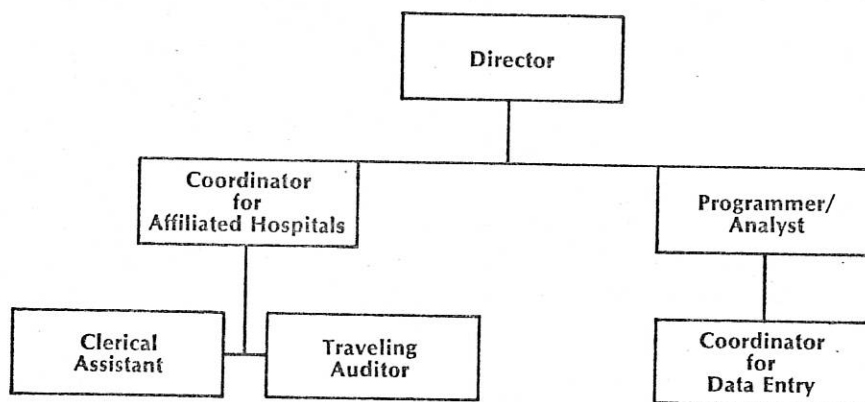
CLERICAL ASSISTANT to the Coordinator for Affiliated Hospital Registries, auditing

incoming records and performing necessary clerical duties.

TRAVELING AUDITOR who visits participating hospitals regularly to assist registries in an advisory capacity.

PROGRAMMER/ANALYST who is in charge of computer programs for overall activity as well as special projects.

COORDINATOR FOR DATA ENTRY who is responsible for entry of all information into the computer.



For further information, contact:

**Cancer Data Service
Mid-America Cancer Center Program
University of Kansas Medical Center
39th at Rainbow Boulevard
Kansas City, Kansas 66103
913 - 831-7022**

V

THE RELATIONSHIP OF THE PRIVATE CORPORATIONS TO THE
UNIVERSITY OF KANSAS MEDICAL CENTER

Submitted by Loren J. Humphrey, M.D.
President, Surgery Professional Association (SPA)

Introduction: A contractual agreement between SPA and the University of Kansas was signed January 1975 for a five-year term. The contract may be terminated by either party with twelve-month notice.

The contract served to guarantee in legal terms those benefits that have accrued to both the physicians and the University by the interface of private practice groups with a University Medical Center. What are these benefits?

I. Benefits of a corporation-university relationship

A. Benefits to the physician and department:

- 1) Incentive: The greater his productivity, the greater the surgeon's benefits so that a corporation is more productive; e.g., in 1970, collections = \$1,050,000 and collections by SPA after four years of incorporation = \$2,300,000 in 1975 (the same number of beds and surgeons).
- 2) Increased fringe benefits have allowed recruitment of top men with small turnover; e.g., salary limits restrict the income to 1/3 or 1/2 of his counterpart in the community, but with fringe benefits almost equal to his community counterpart, he enjoys academic life with less sacrifice.
- 3) Research capability represents the deciding factor that keeps the top surgeon in a university at a reduced salary; e.g., overage from SPA has paid for all research except granting agencies --- the longer he works (70-80 hrs./wk.), the more overage, the more research, the greater departmental prestige, etc.
- 4) Private practice: Every patient is the private patient with his own personal surgeon.

B. Benefits to the University and the State:

- 1) Financial savings: The department receives approximately \$216,500 per year for professional salaries and the corporation returns to the State about \$400,000 cash, teaches 200 medical students and 58 young specialists the year-around and conducts and pays for its own research time and supplies (see attachment 1).
- 2) Free care: Each year the corporation gives over \$300,000 in free care.
- 3) Programs: The corporation structure allows through incentive the retention of top surgeons who, in turn, attract young surgeons who are the workers in vital programs; e.g., in 1970, only 1/2 of the general surgery residency positions were filled and some of these with foreign doctors (now all are filled with

top applicants). These programs are essential to the people of Kansas; e.g., without plastic surgery residents, we would have to close the Burn Center and without cardiothoracic residents, we couldn't do cardiac surgery and so on for many programs because at KUMC we take care of virtually all the critical patients from throughout the State.

- 4) Prestige: Go to any national medical meeting and they know of the Surgery Department in Kansas (they can name many of our nationally known surgeons). This attracts better young doctors, elevates the level of patient care throughout the State and brings in federal grant dollars (\$45,000 in 1970 and \$1,085,000 in 1976 in the Department of Surgery).

II. One corporation for the Medical Center: This issue reappears annually and must be answered with a resounding "preposterous"! Consider:
1) the record over the last few years of contributions by private practice groups to the State, 2) other schools have tried this and lost top faculty, programs, and ended up spending much more money, 3) incentive gets lost in the socialistic philosophy.

Summary: The private practice corporations save the State of Kansas millions of dollars each year while training young doctors and specialists. Being able to attract and hold top faculty and residents, programs giving care to the critically ill people of Kansas, not available otherwise, are maintained with little support of the physicians by the State. Hence, the State supplies the facilities (with the corporations donating a modest \$1 million per year) and the corporations supply physicians with a modest financial support from the State. Furthermore, the corporations have repeatedly demonstrated their ability and capability of propriety by inhouse policing and responsiveness to the wishes of the State.

On the other hand, one large corporation or medical center group practice would: 1) decrease fringes and benefits, 2) lose those faculty who bring in federal dollars with needed programs and national prestige, 3) abolish incentive, and 4) cut collections from medicare by 50% and, consequently, increase offsetting expenditures by the State.

Department of Surgery
KUMC
Support of Teaching Programs

FY 1976

State budgeted support:

Salaries for academic staff	\$315,500*	
Salaries for secretaries	85,800	
Other operating expenses - equipment	36,000	
Total State support		<u>\$437,300</u>

Support from the Surgery Professional Association:

Rent and service	\$175,400		
Hospital equipment fund	46,700		
Exec. V.C. fund	23,400		
To the hospital		245,500	
House staff salary, insurance, etc.		133,800	
Nurse-Technicians' salary, comp. support		169,500	
Secretary-Admin. salaries		128,400	
Physicians Accounting office		47,000	
Renovation of facilities		42,000	
Equipment		87,700	
Supplies, service, rental		72,600	
Visiting lecturers, affiliated faculty		8,300	
Other support - research and teaching		20,300	
Total			<u>\$955,100</u>

Discounts and free care provided			<u>\$676,900</u>
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* Includes \$99,000 for part-time school administration by surgeons.

Special Committee on the
University of Kansas
Medical Center
July 27-28, 1976

Please register your attendance,

Name

Representing

KERMIT KRAWTZ M.D.

KUMC

ARTH TEMPLETON

KUMC - Diag Rad

~~John~~
Cary J. J. J.

KUMC - Surg

~~John~~

KUMC - FP

John J. Retina

Chancellor's Office
Chancellor's Office

Robert Kregel

KUMC

Burton Dudding MD

KUMC - Pediatrics

Richard J. J.

Chancellor

Dr. Ruff

Medicine

Please Register Your Attention

Name

Representing or Address

Caryl Spinkharnay	Med Center Rel.
Helen M. Sims	Med Center Relations
Aue Wachtler	Volunteer Services
Madame Ostman	Admitting / Bus. Off.
Eleanor Martin	O.P. Bus. office
Vernell Goodwin MD	Dept of Medicine
Sally F. Johnson, R.D.	Dietetics & Nutrition
Theresa J. Newell, R.D.	Dietetics and Nutrition
Judith H. Hall, R.D.	Dietetics & Nutrition
Judy Weoman R.D.	Dietetics & Nutrition
Doris Spragg, R.D.	Dietetics & Nutrition
James T. Halling, D.	Dietetics & Nutrition
Beth Stokes, E.D.	Dietetics & Nutrition
Richard Peters	Biometry
Marshall Fine	Careme Journal-World
Irene Bettinger MD	Dept Neurology
Anton M. Siebel MD	Pediatric cardiology
Ethel Nurge	Community Health
Lak Kunkle	Clinical Lab
Jane Beck	Clinical Labs
Cecilia Robertson	Clinical Labs
Vernie M. Seardes	Gravenwood 4th Kansas
Mary Ruth Bramlage	Lear. Kansas
Laura Eaton	KCMO Radio
H. Robinson	KCMO RADIO
Hildegard Knopp, R.D.	Dept. Dietetics & Nutrition
Joan Wilson, M.D.	Dept. Medicine
S. L. Denton MD	Dept Pathology

Please Register your Attendance

<u>Name</u>	<u>Representing or Address</u>
Veta M Garland	Kansas
Therese Chase	Patient Rep. (Oklahoma)
Robert C Ray	Patient Representative (Oklahoma)
Constance Neith	R.N. Dept of Nursing Services
Therese Emberton	R.N. Dept of Wsg Services
Connie Downing	R.N. Dept. Mag Ser
Caral Larson	RN "
Lois McMillan	Physical Plant
R. Gibson	Personnel
Bill Justice	Pharmacology
Alan Forner	School of Nursing
Lily Larson	School of Nursing
Margery Duffey	RN School of Nursing
Mary Quinlan	School of Nursing
Mary Wirthman	Hospital Administration
Stephen Mason	Hospital Admin.
Ben D. Childers	" "
Herman A. Jones Jr	Resident of State of Kansas
Francis Osborne	Oleander Library
Emma Lee Kopp	Miss M.
Mary G. Miller	Nursing Dept KUMC
Beth Johnson	Rotunda Embroidery - F.
Walter Keller	

Please Register Your Attendance

Name

Representing or address

Santiago Guisolia M.D.

Biochemistry
Tepic Capital

Blaney Pigg

Kathryn Schumann

Berth Vogtschoten, MD

Lowell Tubby

Charles Wallas, MD Blood Bank

Thorhill Jensen

Microbiology KUMC
Cardiology + Medicine KUMC

David W. Toph, MD

Robres Couder R.N. - O.R.

Tom Supp RN - O.R.

Pam Snyder RN 3-D

Diana Blum LPN 3-D

DEANIE BOLINGER RPT

PT Education

Dice Olson Admin Asst, Rehabilitation Medicine

William A. Elmer Administration Perinatal Program

Denny K. Ziegler M.D. Chief Dept. Neurology - KUMC

Robert L. BROWN Asst Vice Pres. Columbia University NY

Jamie Miller -

RN - former employee KUMC
4211 W. 108th Street
Prairie Village, Mo.

Patricia McCoy RN - ER

Deborah Gibb RN - 2D

Frank Sedlow

Meal Structures

Robert Francis Admin Asst Nurs. Serv.

Mary Gray, Ph.D.

Dietetics + Nutrition

Carolyn Kruger

Nursing Service

Neeta Brunkow

Dept of Surgery

Diana Brown

School Administration

Margaret McQuinn

Communication Services

Jeanne LeFevre RN

Nursing Services

Please Register Your Attendance
Name Representing or Address

Kay Baker R. N. Masonic Oncology Nurs
Charles M. Bannan Dept. Clin. - Medicine

Jean Bell CU Lab Tech.

Mary Redman Medical Technologist Pathology Laboratory

Margaret Helton MT (ASCP) CLINICAL LABORATORY

Linda Myette Community Health Department

MARK MELHORN 1ST YR. MEDICAL STUDENT

Larry Bamer 1ST yr med. student

Walter Schleich Student adm. & Records

Robert Shields Computer Service

Paula Jolly Community Health

Chris Norrdin Community Health

Robert L. Nylth Division of Continuing Education

James Lemire MD Dept. of Ophthalmology