August 2018


Aurora Health Care
Annual Report

Cancer Program
1987 Statistics

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Aurora Health Care
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During 1987, the Cancer Committee, ably chaired by Dr. Ronald Hart, oversaw the cancer program at St. Luke's Medical Center. Quality Assurance audits were done of lymphomas, ovary and pancreas. A colorectal screen was performed with almost 15,000 individuals participating. The committee supported the hospital becoming smoke-free, in cooperation with the efforts of the American Cancer Society, American Lung Association and the Wisconsin Heart Association. The Cancer Pain Management Team was set up and the area of Oncology was designated a “Center of Excellence” for St. Luke’s.

This annual report focuses on breast cancer, the most common cancer in American women, affecting 136,000 in the United States and 2,900 in Wisconsin in 1988. Although it is now the second leading cause of death from cancer, this disease has a significant impact on women in their most productive years, accounting for the highest frequency of death from cancer in women in the age period when they are raising their families and in the workplace.

In 1987 at St. Luke’s, 156 women were seen with carcinoma of the breast. We are using these women and others from 1981 to illustrate several important components of the cancer program, including the early detection and screening for breast cancer, treatment, and ultimate rehabilitation.

Major studies have demonstrated repeatedly an improved survival for women undergoing screening for breast cancer. Early detection of breast cancer also allows women options for treatment including breast conservation. Adjuvant systemic therapy for women with nodal metastases has been clearly demonstrated to improve survival and is being explored for women with negative nodes. With increasing numbers of surviving women, there is also a greater need for rehabilitative procedures including breast reconstruction.

All of these programs are in place at St. Luke's Medical Center offering state-of-the-art care for patients with breast, as well as other cancers.
New Developments in 1987

Intraoperative Radiation - Howard J. Lewis, M.D.

The Department of Radiation Oncology has developed a program of Intraoperative Radiation Therapy (IORT) associated with the Departments of Surgery, Anesthesiology, and Surgical Nursing for patients with localized abdominal and pelvic malignancies. The program is designed for patients who have a high risk of localized failure with conventional surgery and radiation therapy. It involves transportation of the patient from the operation room theater to the Department of Radiation Oncology with modification of the treatment room to allow surgery and intraoperative radiation under sterile conditions. A protocol was written with site specific addendums for gastric, colorectal, and pancreatic malignancies and was approved by the investigational review committee during late 1986. During the subsequent year additional equipment was obtained, radiation treatment cones were calibrated, and numerous meetings were held with the different participating departments regarding training of the appropriate personnel.

To date we have done exploratory surgery in nine patients with intraoperative radiation therapy being performed in five patients including four patients with colorectal malignancies and one patient with gastric carcinoma. The department continues to provide ongoing information regarding the evolution of the procedure through meetings with referring physician, continuing medical education programs, as well as written correspondence with the medical staff.

Overall, the data from a large number of investigators continued to show improved local control rates with intraoperative radiation therapy for tumors of the stomach, pancreas, rectum, urinary, and bladder while the use of the intraoperative radiation therapy to other sites including the brain, head and neck, biliary tract, and soft tissue sarcomas remain to be fully evaluated. We believe that intraoperative radiation therapy will continue to play an important role in the treatment of locally advanced cancers in which improvement in local control will be reflected in an increased long-term survival.

Surgical placement of the treatment cone to direct the radiation beam to the area of the tumor bed in a patient with colon cancer. This technique decreases the risk of loco-regional recurrence in many patients with retroperitoneal malignancies.
In 1987, the LAK Lab and Biologic Modifiers Program was begun. The illnesses for which this is standard initial therapy today include metastatic hypernephroma and metastatic melanoma. IL 2 LAK has been shown to be no more costly and have no more side effects than modern multimodality therapy for other advanced tumors, such as acute leukemia and ovarian cancer and bone tumors.

There has been an increasing physician awareness about the type of patient who can best benefit from this therapy. Such a patient would be well enough to travel, have a healthy heart, lungs, kidneys and lacks central nervous system metastases and lacks use of steroids or calcium channel blockers or beta blockers.

Other illnesses that can be treated early include individuals who do not want any chemotherapy at all, primary biliary cancer, adenocarcinoma of the pancreas or adenocarcinoma of unknown primary.

Our clinical research interests are: IL-2-LAK efficiency in lung cancer and establishing the maximal dose IL-2 to prime the bone marrow and accompany the LAK cells.

The development of new anticancer agents requires that they be delivered earlier in the course of the natural evolution of the illness. It is clear from our discussions with physicians and patients that this realization requires a continuing education effort on the part of doctors, nurses and patients to make sure that this therapy is understood in its best light and its most appropriate timing. We are looking forward to an exciting and productive next year with expansion and modification of our efforts.

In August of 1987, the Cancer Committee approved the formation of a Cancer Pain Management Team at St. Luke's Medical Center. Since that time, we have developed a procedures manual, we have queried the medical staff about their interest in this concept, and we have identified interested physicians. In addition
several patients have been seen in consultation and these patients' cases have been reviewed by the Cancer Pain Management Team. The Team now consists of a clinical nurse specialist, a psychologist, an anesthesiologist, a neurosurgeon, a pharmacist, and consultants from other medical specialties including radiation/oncology, medical oncology, surgery, and other specialties. The team approach offers an advantage in that it insures more complete consideration of all aspects of a patient's problem by a variety of subspecialists and it also organizes in a convenient way the expertise of a variety of consultants.

The team has made presentations to various departments within the medical staff structure. Although the number seen to date is too small to allow for a meaningful evaluation of the impact of the program, there have been changes in the medical management of pain in the cases the team has seen and patients have reported improved pain management in a majority of the cases. In one case reviewed by the team, the referring physicians wished to explore the possibility of alternatives to invasive surgical procedure. The team assisted in the medical decision process, basically concluding that the surgical procedure offered the best hope for pain relief. In addition to the patients, discussed at regular team meetings, there have been some referrals of patients whose cancer is essentially in remission and these patients have been referred to providers who specialize in chronic pain management.

The team has moved from the concept stage to the operational stage. Future activities will focus on finding ways to encourage the use of the team in appropriate cases, publicizing the existence of the team and developing educational programs for individuals, patients, their families and for professional personnel.

Brain Implants -
James Bruckman, M.D.
Lawrence J. Frazin, M.D.
Ronald D. Hart, M.D.

Beginning in October 1987, physicians at St. Luke's Medical Center started a coordinated approach to treatment of malignant brain tumors. There initial treatment protocol started by Dr. Lawrence Frazin in
Neurosurgery and Dr. James Bruckman in Radiation Oncology involved using interstitial radioactive brain implants placed by stereotaxic technique to treat recurrent and primary malignant brain tumor patients. Over the next year and a half, 17 patients were treated on this protocol which investigated the effectiveness and safety of the technique. Following successful completion of that protocol, a second protocol involving Neurosurgery, Radiation Oncology, and now Medical Oncology with Dr. Ronald Hart was started. This treatment aims at a comprehensive approach to patients with primary and recurrent malignant brain tumors. One new area being investigated by this current protocol is to try and answer the question: "Can preoperative chemotherapy and radiation therapy improve the outcome for patients with malignant astrocytomas?" Currently eight patients have been entered on this protocol and it is too preliminary to indicate results. These initial two protocols are viewed as a step towards a cooperative approach for treating patients with CNS tumors.

- Brain Implants

(continued)

Insertion of temporary radioactive implants utilized in patients with primary and recurrent brain tumors may offer a greater possibility of local control and survival than can be obtained with conventional treatment.
Breast Screening Clinic -
Michael Kehoe, M.D.

Screening mammography offers women the potential for detecting breast cancer at its earliest stage, when it is almost 90% curable.

Expanding on 25 years of mammography at St. Luke's and with the cooperation and approval of the Medical-Dental Staff, a Breast Screening Program was instituted in November of 1985 at our institution. The mammograms are performed on two Philips diagnostic dedicated mammographic units by fully trained radiologic technologists, using the latest low-dose film/screen imaging techniques. The physical examination and mammography films are promptly reviewed by the staff radiologists and reports issued to the referring physician. Self-referral patients are notified of normal or abnormal mammography results.

In 1987, 4,132 mammograms were performed, with 337 representing self-referred screening examinations; 273 needle localizations were performed for abnormal mammographic finding, with 37 of these being positive for malignancy representing a rate of 13.6% in the needle biopsy group.

In addition to the radiograph mammography, other imaging modalities, particularly ultrasound, are readily available when indicated for further evaluation of breast abnormalities. However, these are not primarily screening modalities.

Nutritional Services -
Sharon Thompson, R.D.

Good nutrition is important during the treatment of all diseases. It is an especially difficult goal to achieve for cancer patients as the disease and its treatments can cause severe malnutrition.

A clinical dietitian is available to assist cancer patients during their treatments to maintain good oral intake and maintain their weight. Follow-up assessment and encouragement are provided as treatment progresses and changes. The use of high calorie, high protein beverages and foods, as well as nutrition supplements are all encouraged for consumption by the cancer patient.
Rehabilitation Services provide innovative programs for individuals with cancer. Many oncology patients benefit from services provided by the staff from the Rehabilitation Department. Depending on the physician's request, patients may have contact with Physical Therapists, Occupational Therapists, Speech Therapists, Audiologists and Recreational Therapists. These staff members provide strengthening exercises, mobility, transfer and ambulation training. They also provide homemaking, self care training, communication and swallowing evaluations. They may provide hearing and hearing aid evaluations and help with leisure activities.

The Rehabilitation Team works closely with individuals to help them achieve the highest possible level of independence in mobility, self care and communication.

A sharing of knowledge and information between Rehabilitation Services staff and other Oncology staff occurs through inservicing, oncology committee meetings, and multidisciplinary rounds. A walking track has been established on the oncology unit to encourage increased patient activity throughout the day. Group exercise programs for oncology patients have also been implemented.

The goal of the Rehabilitation Services staff is to provide a comprehensive program to maximize each individual's independence and meet each individual's needs. The staff assists the oncology patients to improve and adjust the temporary or long term physical limitations resulting from cancer and its treatment.

The Inpatient Oncology Unit has expanded its available inpatient beds to 27 in 1987. This was done in response to a growing oncology population. There were 1,105 chemotherapy drug infusions that were given from January 1987 to December 1987, a slight increase over the number of treatments administered in 1986.
Inpatient Oncology Unit -
(continued)

With the initiation of the intracranial radiation implant program in late 1986, the number and complexity of brachytherapy patients has steadily increased over the past year.

The Multidisciplinary Team has seen a number of changes in Rehabilitation Services (Physical Therapy, Occupational Therapy and Speech Therapy). Since October, a full-time Social Worker has been dedicated to the Oncology Program.

Outpatient Oncology Service -
Marija Bjegovich, R.N., Kerry Twite, C.N.S.

The Outpatient Oncology Center, located in the Health Science Building, has grown in the number of services it provides since moving to its new location in February 1986. From January 1, 1987 to October 31, 1987, Outpatient Oncology has had a patient census of 5,429 and has administered 5,125 chemotherapy drug infusions. On November 11, 1986, the Outpatient Oncology Day Bed Area opened offering hours from 8 a.m. to 8 p.m. to deliver oncology-related services. This Day Bed Area was opened to accommodate oncology patients who required technical procedures, transfusion therapy, palliative/symptom management care, or chemotherapy treatments with administration lengths greater than two hours. From November 11, 1986 to November 30, 1987, the Day Bed Area has treated 883 patients. Patient satisfaction surveys over the past year for the Day Bed Area have indicated high patient acceptance as well as physician satisfaction.

Some of the new specialized services available through the Outpatient Oncology area include:

- The “New Image Hair Boutique” which is a free consultation service for wig/hairpiece selection for persons experiencing hair loss during cancer treatment. The service is offered by area hair salons.

- Music Therapy and Relaxation tapes are available through the “Program for Self Relaxation Techniques.” The Outpatient Oncology staff is trained in relaxation techniques and guided imagery to assist our patient population in minimizing anxiety and anticipating nausea and vomiting.
• The “Bookstore” is open during clinic hours and houses multiple cancer education resources for patients, family, and significant others to utilize. There are multiple teaching models and videos available.

• Outpatient Oncology Pharmacists are available from 8 a.m. to 4 p.m. most days in the satellite pharmacy within the department. They are available to answer physician and patient questions related to medications.

There are many new and exciting programs being planned for 1988.
In 1982, St. Luke’s Hospital participated in a short-term patient study for the American College of Surgeons. The first 25 female patients initially diagnosed and/or treated for Carcinoma of the breast from January 1, 1981 through December 31, 1981 were chosen. Information was gathered about patient age, the site of disease, stage of disease, and the treatment administered. This information was submitted to the College of Surgeons for comparison with national results.

A similar study has now been completed in 1988 in order to compare the first 25 breast cancer cases of 1987 to those first 25 cases of 1981. The results of this expanded study have shown trends toward earlier breast cancer detection with a more localized disease being treated. These results have been presented in graph form on the following pages.

Breast cancer is the most frequent cancer in women, occurring in one in ten women according to the American Cancer Society.
Are More Intraductal Carcinomas of the Breast Being Diagnosed or Initially Treated at St. Luke's Medical Center?

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>68</td>
</tr>
<tr>
<td>1982</td>
<td>90</td>
</tr>
<tr>
<td>1983</td>
<td>103</td>
</tr>
<tr>
<td>1984</td>
<td>94</td>
</tr>
<tr>
<td>1985</td>
<td>145</td>
</tr>
<tr>
<td>1986</td>
<td>176</td>
</tr>
<tr>
<td>1987</td>
<td>156</td>
</tr>
</tbody>
</table>

832 Total Cases

Breast Cancer Treatments for 1981 and 1987 Show an Increasing Trend Toward Breast Conservation

<table>
<thead>
<tr>
<th>Year</th>
<th>Current Year</th>
<th>Total Patients</th>
<th>Breast Conservation</th>
<th>Mastectomy</th>
<th>Patients with No Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td></td>
<td>64</td>
<td>22%</td>
<td>78%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td></td>
<td>147</td>
<td>32%</td>
<td>68%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

1981:
- Breast Conservation Patients: 14
- Mastectomy Patients: 49
- Patients with No Treatment: 1

1987:
- Breast Conservation Patients: 47
- Mastectomy Patients: 100
- Patients with No Treatment: 0
Site Distribution for Breast Cancer Cases

**1981 25 TOTAL CASES**

- **Central:** 6%
- **Unspecified:** 4%
- **Inner:** 0%
- **Outer Upper Quadrant:** 12%
- **Inner Upper Quadrant:** 4%
- **Outer Lower Quadrant:** 0%
- **Inner Lower Quadrant:** 8%
- **Nipple:** 4%
- **Right Breast:** Total = 10
- **Left Breast:** Nipple 0%

**1987 25 TOTAL CASES**

- **Central:** 16%
- **Unspecified:** 5%
- **Inner:** 4%
- **Outer Upper Quadrant:** 15%
- **Inner Upper Quadrant:** 8%
- **Outer Lower Quadrant:** 0%
- **Inner Lower Quadrant:** 4%
- **Nipple:** 0%
- **Right Breast:** Total = 10
- **Left Breast:** Nipple 0%
Stage of Disease

1981

- Localized: 12%
- Regional to Adj. Tissue: 12%
- Regional to Adj. Tissue & Nodes: 36%
- Unknown: 12%
- In Situ: 8%
- Distant: 20%

1987

- Regional to Adj. Tissue & Nodes: 16%
- Regional to Nodes: 12%
- Distant: 8%
- In Situ: 0%
- Unknown: 4%
- Localized: 48%
- Regional to Adj. Tissue: 4%
Age of Patients at Diagnosis

Average age of diagnosis for 25 cases of 1981 = 67.4
Average age of diagnosis for 1981 national results = 62.1
Average age of diagnosis for 25 cases of 1987 = 59.8

How has the Number of Breast Reconstruction Surgeries Changed for Female Patients Diagnosed with Breast Cancer?

[Graph showing the number of breast reconstruction surgeries from 1981 to 1987]
Surgical Case Distribution for 1981 and 1987

<table>
<thead>
<tr>
<th>Surgical Procedure</th>
<th>1981</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biopsy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lumpectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simple Total Mastectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simple Mastectomy with Node Dissection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radical Mastectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extended Radical Mastectomy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of Procedures

Treatment Case Distribution for 1981 and 1987

<table>
<thead>
<tr>
<th>Treatment Given</th>
<th>1981</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biopsy Only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biopsy &amp; Chemotherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biopsy/Radiation &amp; Chemotherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery Only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery &amp; Radiation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery &amp; Chemotherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery &amp; Hormones</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery/Radiation &amp; Chemotherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery/Hormones &amp; Chemotherapy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of Procedures

1981 Survival Curve

Comparison of Survival Curve for 25 cases from 1981 Breast Study to all 1981 Breast Cancer Cases.

Year of Survival

1 yr 1 yr 2 yr 3 yr 4 yr 5 yr

Percent Survival

0 10 20 30 40 50 60 70 80 90 100

- 1981 25 cases
- 1981 64 cases total
Cancer of the Stomach Long and Short Term Patient Care Evaluation Studies
American College of Surgeons

St. Luke's participated in this national study in 1988. One of the purposes of this study is to answer questions posed by the American College of Surgeons. We have chosen to answer some of the more interesting questions for you on the following pages using St. Luke's data. National data should be available to us in 1989. Twenty-three successive cases from each year 1982 and 1987 were chosen.

What are the trends in the use of gastroscopy?
1982 87% of the patients had gastroscopy done. (20 pt.)
1987 96% of the patients had gastroscopy done. (22 pt.)

How many patients have a history of precancerous benign conditions?
1982 13% of the patients had history of ulcers. (3 pt.)
13% of the patients had history of other, varied, benign gastric conditions (3 pt.)
74% of the patients had no history of benign gastric conditions (17 pt.)
1987 26% of the patients had history of pernicious anemia (6 pt.)
9% of patients had history of ulcers (2 pt.)
9% of patients had history of other, varied benign gastric conditions (2 pt.)
57% of patients had no history of benign gastric conditions (13 pt.)

What are the histologies?
1982 96% of stomach histologies were adenocarcinoma. (22 pt.)
1987 78% of stomach histologies were adenocarcinoma. (18 pt.)
How Does Our Hospital Compare with Other Stomach Cancer Data by Age and Sex?

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-29</td>
<td>2% 0% 0%</td>
<td>1% 0% 0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-39</td>
<td>2% 6% 0%</td>
<td>0% 0% 0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>5% 7% 0%</td>
<td>2% 0% 0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td>12% 7% 11%</td>
<td>10% 30% 0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-69</td>
<td>23% 16% 26%</td>
<td>20% 30% 75%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70-79</td>
<td>40% 22% 42%</td>
<td>31% 20% 28%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80+</td>
<td>18% 36% 21%</td>
<td>36% 20% 0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* WISCONSIN DATA SUBSTITUTED FOR UNAVAILABLE NATIONAL DATA

What is the Association of Tumor Grade with Stage and Survival?

22 PATIENTS 1982
ONE PATIENT EXCLUDED FOR UNKNOWN GRADE

- **Regional**
- **Local**
- **Distant**

Survival by Grade

Percent Survival

<table>
<thead>
<tr>
<th>Years</th>
<th>All Cases 22 patients</th>
<th>Grade I 3 patients</th>
<th>Grade II 5 patients</th>
<th>Grade III 14 patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>3</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>4</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>
Cancer of the Stomach Long and Short Term (continued)

St. Luke's was asked to restage all cases from both years using the new 1988 version of the AJCC staging scheme. The pie graphs above illustrate the percentage of each stage accenting the largest percentage stage. A theory could be made that patients are being diagnosed earlier in the disease process at a less advanced stage.

What are the changes and trends in treatment?

<table>
<thead>
<tr>
<th>Treatment Type</th>
<th>Number of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Treatment</td>
<td>3</td>
</tr>
<tr>
<td>Palliative Surgery</td>
<td>4</td>
</tr>
<tr>
<td>Palliative Surgery &amp; Chemotherapy</td>
<td>1</td>
</tr>
<tr>
<td>Gastrectomy</td>
<td>8</td>
</tr>
<tr>
<td>Gastrectomy &amp; Chemotherapy</td>
<td>6</td>
</tr>
<tr>
<td>Gastrectomy &amp; Radiation</td>
<td>3</td>
</tr>
<tr>
<td>Gastrectomy &amp; Radiation &amp; Chemo</td>
<td>1</td>
</tr>
<tr>
<td>Chemotherapy Only</td>
<td>2</td>
</tr>
<tr>
<td>Radiation Only</td>
<td>1</td>
</tr>
<tr>
<td>Chemotherapy &amp; Radiation</td>
<td>3</td>
</tr>
</tbody>
</table>
Since the review in 1982, two developments in the treatment of stomach cancer have been reported which have changed the care of patients. First, there has been the use of aggressive chemotherapy as an adjuvant to surgery alone, or for palliation in patients with advanced disease, using Adriamycin-based regimes which have demonstrated an improvement over the past use of 5 FU alone. In addition, a randomized trial from the Mayo Clinic demonstrated a benefit of postoperative 5 FU and radiation therapy as a surgical adjuvant for poor prognosis gastric carcinoma, obtaining a 23% five year survival in those receiving adjuvant therapy versus a 4% survival in those patients who were randomized to no treatment after surgery.

Marcia J.S. Richards, M.D.
Chairman
Cancer Committee
Our registry had a landmark year in 1987. A total of 1,099 cases was accessioned into the registry. Of this total, 922 cases were analytical and 177 cases non-analytical.

This brings our entire registry data base to 12,878 cases at the end of 1987. The number of patients still alive is 5,131. We also maintain a 93% follow-up rate.

St. Luke's Medical Center is part of Aurora Health Care. Our affiliate Sinai Samaritan Medical Center also maintains registries. The Samaritan Campus accessioned 387 patients into their registry in 1987, with a total data base of 5,637. The Sinai Campus added approximately 430 patients into their registry in 1987, with an approximate data base of 5,500. Together Aurora Health Care registries have a data base of approximately 24,000 cases, 1,916 of them from 1987.

We have prepared on the following pages a statistical profile to accent various distributions of St. Luke's Medical Center's 1,099 patients.
1987 Distribution by Age and Sex of all Cases in the Registry

New Case Distribution By Site for 1987
St. Luke's Cancer Conferences

**Tumor Board Conference**
Conferences are held on the second and fourth Monday of every month at noon. This is a patient-oriented, multi-disciplinary cancer conference. For more information or questions, please call 649-6225.

**Head and Neck Tumor Conference**
The Head and Neck Conference at St. Luke's Medical Center has successfully operated through its third year. Forty-seven new cases have been presented. Appropriate recommendations for treatment have been suggested by the dedicated physicians representing the various specialties involved.

The philosophy of providing the best possible care for the head and neck tumor patients continues to be the foundation of this conference.

Conferences are held on the first and third Monday of every month at noon. This is a conference to discuss selected difficult head and neck tumors from a multi-disciplinary approach. For more information or questions, please call 649-3900.

**Security Savings and Loan Cancer Lectureship Series - 1987**

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<th>Date</th>
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<tr>
<td>3/19/87</td>
<td><strong>Radiation Therapy for Oral Cancer</strong></td>
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<td></td>
<td>Hajime Fuchihata, D.D.S., Ph.D. Chairman, Department of Oral and Maxillofacial Surgery</td>
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<td>Osaka, Japan</td>
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<td>11/5/87</td>
<td><strong>New Treatment for Malignant Gliomas</strong></td>
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<td>William M. Wara, M.D. Professor in Residency</td>
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<td></td>
<td>Department of Radiation Oncology</td>
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<td>Department of Pediatrics</td>
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<td>University of California</td>
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<td>San Francisco, CA</td>
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<td>11/12/87</td>
<td><strong>Adventures in Neuro-Oncology, The Epidemic of Primary Brain Lymphoma</strong></td>
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<td>Fred H. Hochberg, M.D. Associate Professor of Neurology</td>
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<td>Harvard Medical School</td>
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<td>Boston, MA</td>
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**Caring for Cancer Patients**
A seminar for pastoral ministers in their role as members of the Health Care Team, February 25, 1987.
STAGE - Extent of disease determined at the time of diagnosis and/or initial therapy.

IN SITU - a tumor classified microscopically as in situ, non-invasive, pre-invasive, non-infiltrating, intraductal, intraepithelial or intraepidermal.

LOCAL - neoplasm restricted to the organ of origin, but may be invasive or infiltrating within the organ of origin.

REGIONAL - a tumor that has extended beyond the limits of the organ of origin into (1) surrounding organs or tissues by direct extension, (2) regional lymph nodes by metastasis, or a combination of (1) and (2) and appears to have spread no further.

DISTANT - a neoplasm that has spread to other organs or lymph nodes remote from the primary tumor.

FIRST COURSE OF TREATMENT - The tumor directed treatments started within the first four months after diagnosis.

ANALYTIC CASES - Cases which are first diagnosed and/or given their first course of treatment at St. Luke’s Medical Center.

NON-ANALYTIC CASES - Cases which are seen at St. Luke’s Medical Center after the first course of treatment and those cases where the patient is diagnosed at autopsy.

TREATMENT

SURGERY - the partial or total removal of the tumor excluding biopsy.

RADIATION - cancer-related beam and non-beam therapy (non-beam includes radium, cesium and radioactive isotopes).

CHEMOTHERAPY - treatment of cancer using drugs.

COMBINED THERAPY - refers to any combination of surgery, radiation, chemotherapy, hormone therapy, or other therapy administered jointly as a single course of treatment.

DIAGNOSTIC ONLY - cancer-related treatment not given; this may occur for many reasons, for example, patient refused treatment, diagnosed at autopsy, or the patient’s general condition is unsatisfactory for treatment.

REFERENCES

Cancer Facts and Figures, 1987, American Cancer Society

Cancer Statistics, 1987, American Cancer Society - Professional Education Publication

