N E T W O R K

THE NEWSLETTER OF THE INTERNATIONAL NETWORK FOR CANCER TREATMENT AND RESEARCH

INCTR

Volume 2, Number 4, Spring 2002 — **Inside**: The Annual Meeting - **7** The INCTR Awards - **11** Case Report - **16** News and Letters - **14** Shaukat Khanum Memorial Cancer Hospital & Research Center - **17** Profile in Cancer Medicine - **20**

THE PRESIDENT'S MESSAGE

CONTINUING CONSTRUCTION

by Ian Magrath

Earlier this year, I had the opportunity to visit the magnificent but startlingly unusual church in Barcelona, la Sagrada Familia, designed by the Catalonian architect Antoni Gaudi. Based on the style of a Gothic cathedral, the building eschews the classical arches and flying buttresses in favor of an almost surrealistic appearance. Irregular curves and unexpected asymmetries replace the strict proportionality and formal lines that we encounter in most large buildings, whether ancient or modern. In places, the stone seems to have melted and run down the walls like hot wax on a candle, piling up into strange shapes from which human forms representing saints and apostles emerge. The most prominent feature of the building is the soaring spiral towers—there will eventually be 18 of them—inspired, apparently, by Mount Monserrat, a mass of limestone which arises abruptly from a plain some 50 kilometers to the northeast of Barcelona. The mountain has been twisted into strange shapes by earth movements while numerous caves have been sculpted out of the soft rock by that most gentle and patient

of artists—water (see picture above). Gaudi's towers are pitted with similar, cave-like orifices. High up on the steep cliffs of the mountain are the ruins of a Benedictine monastery founded in the 11th century, and its more recent replacement. The latter houses a black wooden image of the Virgin Mary, which, tradition has it, was carved by St Luke. Some would say, however, that the famous "Black Madonnas," which have been found all over southern Europe, are actually representations of the Egyptian goddess Isis, who was worshiped by a secret sect in Europe for centuries.

In my annual report at INCTR's Annual Meeting this year, I used la Sagrada Familia as a metaphor for the growth and development of the INCTR. Both are still under construction, both are rather unique edifices which don't conform to the usual pattern, and both have connections to more distant parts of the world. They are icons of the larger human family, for which the symbolism of mother and child is particularly apt, and in spite of their gravity of purpose, project a certain youthful irreverence. In the case of INCTR, this is essential to the invention and re-invention that

Ian Magrath (left) listens to Dr Indraneel Mittra's ideas on cancer control in developing countries such as India.

must constantly go on if the broad range of problems faced in developing countries is to be addressed and the creative energies of our many collaborators, all too often stifled by lack of resources, are to be released. Unlike la Sagrada Familia, the INCTR was not inspired by a natural rock formation, although its efforts may well be likened to the challenge of climbing to the top of a high mountain: success is dependent upon a team approach, a clear purpose, and a well-planned overall strategy, although the latter needs to be plastic enough to be bent and twisted like Gaudi's limestone, as the need arises.

Since its creation, INCTR's growth has been continuous—both with respect to the projects that have been initiated or are in the planning stages, and to the evolution of its network. It has begun by focusing on the cancers of women and children. Last year at this time, I spoke of laying the foundations of INCTR. This year, I'll discuss the continuing construction.

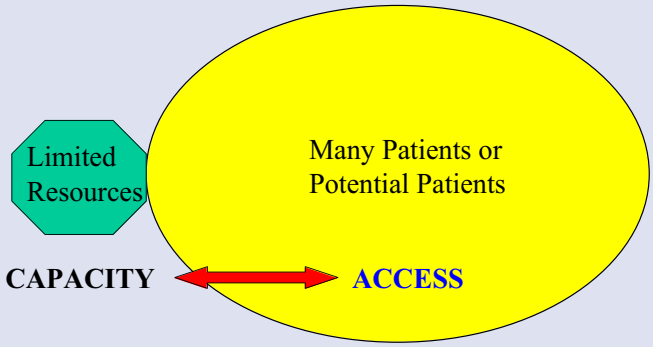
Cancer in Children

One of the earliest projects, decided upon at the first INCTR Annual Meeting, was to address the problem of retinoblastoma, a tumor of the eye occurring in infants, which is both more prevalent in developing countries and tends to present to treatment centers very late in its course. This leads to the deaths of many children from retinoblastoma—a rare occurrence in more affluent countries. In addition to the development of a questionnaire to identify the causes of late presentation, several members of the Retinoblastoma Strategy Group have initiated national programs designed to bring the importance of early diagnosis to both the doctors who first see the patient, and to the public. Pictures (in the case of Brazil, a brief film) of children with leukocoria, the white appearance of the pupil that occurs shortly after the tumor develops within the eye, are the mainstay of these campaigns (see page 16). Protocols for the treatment of advanced disease are presently being designed and we hope that these will be activated in the next year.

A second tumor that occurs in children and adolescents, osteosarcoma, was also selected for study at the first Annual Meeting, in part to explore the issues that would arise in conducting an international clinical trial involving inter- and intra-institutional cooperation. The treatment protocol for advanced osteosarcoma has been completed by the Osteosarcoma Strategy Group and four of the six local ethical review committees that will need to approve the study have already done so.

Acute lymphoblastic leukemia (ALL) has been a longstanding collaborative project among INCTR staff and several Indian centers, initially via the National Cancer Institute, Bethesda, but now, through INCTR's Leukemia Strategy Group. Analysis of 1,048 patients treated between 1990 and 1997 with the same protocol (MCP841) at three major centers, the Cancer Institute in Chennai, the Tata Memorial Hospital in Mumbai, and the ALL India Institute of Medical Sciences in Delhi, has been largely completed and a manuscript for publication is in preparation. These results demonstrate clear differences in the patient populations being treated at each of these centers as well as differences in outcome. Surprisingly, uniform risk factors that apply to the populations in all three centers cannot be defined, and although risk factors are more similar in Mumbai and Delhi, a careful analysis of the Mumbai data suggests that even in the last three years of the study, the proportions of patients with various clinical characteristics have changed, as have the identifiable risk factors. These data illustrate several very important points. First, it cannot be assumed that risk factors (i.e., patient characteristics associated with prognosis) identified in one patient population will apply to another population, even when the same treatment protocol is used. Thus, application of treatment successful in one part of the world, or even in another institution in the same country, by no means guarantees success in another. The reasons for this include possible differences in the strictness of adherence to the treatment

schema and in the ability to support patients through the sometimes life-threatening side effects of treatment, as well as differences in the "biological profile" of what we think of as the same neoplasm. All neoplasms actually consist of families of neoplasms, the members of which differ to a greater or lesser extent from each other, and which may require a somewhat different treatment approach. This is illustrated by the marked differences in the proportion of precursor T and precursor B cell ALLs in each of the three Indian centers. Until recently, the ability to precisely characterize tumors has been limited to morphology—in essence, the study of the size, shape and other physical features of the malignant cells (rather like recognizing one's neighbor by her facial features), and to the study of the expression of a small, although increasing number of gene products (the proteins responsible for all of the tumors characteristic features, physical and functional). In the last few years, powerful new methods of identifying different family members of the same tumors (and of course, distinguishing one family from another) have been developed. In one such technique, DNA microarray, the pattern of expression of not just a few, but tens of thousands of genes, can be studied simultaneously.



The basic problem for patients with cancer in developing countries can be summed up as "poor access to cancer care." This arises because of the limitations in the capacity to deal with the extant cancer burden resulting from the relatively small number of well-trained specialists and ancillary health care personnel, the paucity of well-equipped specialized centers or departments, and limitations in the family's financial ability to deal with the added burden of a diagnosis of cancer, including the cost of diagnosis, treatment and follow-up, time off work and transportation. To a large degree, capacity and access bear an inverse relationship to each other. Increasing capacity for treatment and prevention would improve access to care.

Characterizing Cancer Cells

The examination of the pattern of expression of a large number of genes is a much more precise way of characterizing a cell than simply looking at its size, shape and other architectural features. It is likely that microarray techniques will reveal a great deal more information about tumors, leading to better classification and diagnosis, as well as improved ability to predict the response to therapy. Since the pattern of gene expression also contains within it the modifications caused by the genetic abnormalities responsible for creating the malignant cell in the first place, this kind of technique is also likely to be of value in the development of drugs targeted towards these genetic lesions—i.e., to the development of treatment that is highly specific to the tumor cell. In conjunction with colleagues in India and the King Fahad Children's Medical Center Research Department as well as the King Faisal Specialist Hospital Research Center in Saudi Arabia, INCTR is developing plans to use molecular profiling techniques, including DNA microarray, to better understand the differences in clinical characteristics and response to therapy that have been identified in Indian patients with ALL treated at different centers, and, of course, between Indian patients and patients in other countries. As time goes by, these same techniques will be applied to other tumors.

The work in India will be extended through two additional projects. The efficacy and toxicity of a new, hopefully improved version of protocol MCP841 will be explored in the same three Indian centers. But as protocol MCP841 has more than doubled the survival rates of ALL, an important step, while studying the pros and cons of the new protocol, will be to introduce MCP841 to other centers in India where results remain poor. This will be done through the development of an Indian cooperative group whereby the major centers will be linked to smaller centers and work closely with them in order to assist implementation of MCP841 and to ensure accurate collection of data pertaining to response and toxicity.

Plans for this are already in an advanced stage.

To complete its repertoire in the context of childhood cancer, INCTR will work with collaborators in several equatorial African countries to develop an effective treatment protocol for the treatment of Burkitt's lymphoma. This project will be undertaken alongside the work of other organizations that are members of INCTR's initiative known as the Global Alliance for the Cure of Childhood Cancer, which met, along with INCTR's new Strategy Group for Lymphoma and a number of African oncologists and pathologists at the Annual Meeting. Together, it is hoped that these organizations can ensure better access to effective therapy for this potentially curable disease, which accounts for a high fraction of childhood cancer in equatorial Africa.

INCTR's Mission

The INCTR is dedicated to helping build capacity for cancer treatment and research in countries in which such capacity is presently limited, and thereby to create a foundation on which to build strategies designed to lesson the suffering, limit the lives lost, and promote the highest quality of life for children and adults with cancer in these countries and to increase the quantity and quality of cancer research throughout the world.

Cancer in Women

In the context of cancer in women, INCTR's efforts have just begun. A collaboration has been forged with Dr Sankarnarayanan of the International Agency against Cancer (IARC). IARC has been studying the optimal method for preventing cancer of the uterine cervix in a number of countries in Africa and Asia. This disease is a major problem in a high proportion of developing countries, and more important than breast cancer as a cause of death in middle-aged women (aged 39-59 years) in poor populations. Visual inspection of the cervix after painting it with either acetic acid (vinegar) or Lugol's iodine has proved to be a sensitive, but inexpensive method of detecting abnormal cells on the surface of the uterine cervix which have a high chance of evolving into cancer. These techniques have the major advantage over the more well-known "Pap smear" that trained cytologists are not required to make the diagnosis, and results are obtained within minutes. This avoids the need for most women to return—treatment can even be given immediately when the pre-malignant lesions are small enough, e.g., by freezing the cervix (cryotherapy). Three centers have been established in Nepal, where health personnel have already undergone training in the visual inspection techniques, and screening of women in the appropriate target populations in the regions is about to begin. A second site, in the Ocean Road Cancer Center in Tanzania, has been selected as another potential partner in this first phase of a cervical cancer screening program. Through INCTR's newly established Cervical Cancer Strategy Group, which includes members from a number of Asian, African and Latin American countries, and in conjunction with IARC, this program will be developed further. The Strategy Group will also decide whether to undertake a therapeutic program in locally advanced cervical cancer. INCTR (USA) will take a leading role in coordinating programs in Latin America, and Drs Robert Hilgers and Ted Trimble of the International Gynecological Cancer Society, who attended the first meeting of the group, have offered their assistance in the development of future projects.

Breast cancer was a selected theme at INCTR's 2002 Annual Meeting, and a number of topics were identified as future activities of the also newly established Breast Cancer Strategy Group. This is now the most common cancer in the world in women, and must clearly be on INCTR's agenda. Potential projects include characterizing risk factors for the development of breast cancer in women in developing countries, identifying the causes of late presentation, establishing programs of early detection, and the development of appropriate treatment protocols for locally advanced disease. Decisions will be made this year in concert with Strategy Group members regarding areas most feasible for the establishment of INCTR-coordinated collaborative studies.

Information Needed for Effective Cancer Control

In addition to its disease-specific endeavors, INCTR has begun to move forward in the area of collecting information relevant to cancer control, particularly with respect to cancer registration. It is working to establish a new cancer registry in Lahore, Pakistan, which will be located at the Shaukat Khanum Memorial Cancer Center and Research Center, this edition's featured "Partner." This project will be developed in collaboration with Dr Max Parkin's depart-

ment of Descriptive Epidemiology at the IARC, which has a vast experience in the area of cancer registration in developing countries. INCTR is also hoping to develop, again in collaboration with IARC, improved cancer registration in children (in which the primary "site" orientation of most cancer registries is not very effective), and to identify available resources for cancer control in selected regions or countries. Combined information of this kind should make the development and institution of cancer control programs more rational and effective.

Educational Programs

Education, of course, is an element in everything INCTR undertakes—and is the central pillar of its strategy to build capacity for cancer research and treatment in developing countries. In addition to the learning experiences of participating in INCTR strategy groups and collaborative projects, INCTR is developing a discipline-related educational program. Last year, the first meeting of the Education Committee, chaired by Professor Ama Rohatiner, took place, and a decision was made to form subcommittees for the development of educational tools and programs in various areas relevant to cancer control. The sub-committee for data management met at the Annual Meeting, and a second group decided to form a new subcommittee for palliative care, the latter to meet again later this year. Discussion has also been held with respect to developing a sub-committee for cancer nursing, and a number of persons active in this area in developing countries have expressed a strong interest in participating in expanding educational and training programs for cancer nurses. INCTR has also agreed to help develop a module of cancer education for medical students which will be used at the recently established University of Kathmandu Medical School. This is a particularly important area of endeavor, since a significant factor in late diagnosis or inappropriate referral of patients with cancer results from lack of knowledge on the part of the physician who first sees the patient. Ensuring that all young physicians have at least a basic knowledge of cancer, including predisposing factors—particularly tobacco use—and are also familiar with available resources within their country for cancer treatment, would eventually help to decrease the time it takes for patients in developing countries to reach a center able to deliver effective care. This represents one of the components of INCTR's long-term strategic approach to capacity building.

Continuing education is another area of considerable importance. Dedication to the care of patients with cancer infers a commitment to life-long learning. There is still a paucity of clinical research in the world—even in resource-rich countries only a few percent of all patients with cancer but most children less than 14 years are entered into clinical research studies. The relatively greater amount of research that has been done in childhood cancer is doubtless a factor in the rapid progress made in recent decades—the five-year survival rate, which is close to the anticipated cure rate, is now more than 77% for childhood cancers in the USA, for example. Clearly, it is essential that more cancer specialists are trained in the conduct of clinical trials. This entails an understanding of the disease or diseases being studied, a knowledge of scientific methodology and also of the ethical and regulatory issues that apply nationally and internationally. INCTR has therefore begun, with the support of Eli Lilly, to conduct workshops on clinical trials methodology. The first of these was held in Beijing in conjunction with the Chinese Society of Clinical Oncology and was very successful. Other workshops of this kind are in the planning phases, and it is anticipated that training workshops in a variety of disciplines, as well as in specific areas of oncology, will become an important element in INCTR's educational program in the future.

This year, INCTR's Visiting/Exchange Expert program was also launched. This program has two components. In the first, a specialist from one country visits an institution in a developing country for a mutually beneficial exchange of experiences and views with multiple staff members and trainees. Such visits may include ward rounds, viewing of pathology slides or diagnostic images, and delivery of seminars and/or more formal lectures. In the second, a specialist trainee from an affluent nation spends an elective period in a developing country. This will greatly expand the experience of the trainee, and hopefully engender a lifelong interest in cancer in developing countries. By maintaining contact with Visiting Fellows, INCTR hopes to gradually increase the pool of specialist talent that it can call upon—a second component of its longer term strategy.

In the course of the next year, INCTR plans to expand its website by making available slide presentations on a variety of topics, including global cancer issues, research methods (e.g., clinical trials management) and disease-specific presentations.

NETWORK

Network Infrastructure

Finally, the INCTR itself has continued to evolve. New branches have been developed in France (Alliance Mondiale Contre le Cancer, AMCC, described elsewhere in this edition of *Network* on page 17) and an office will open in the UK later this year. As the year progresses, these should have a significant impact on INCTR's resources for program development. It is anticipated that AMCC will focus particularly on women's and children's cancers in Africa, and the London Office on education. Offices have also been established in Nepal and India, and additional offices in Egypt and Brazil should be functional before the end of the year. It is anticipated that the offices/branches in developing countries will assist with local coordination of projects, with quality control (e.g., through the employment of data monitors who will visit collaborating units and assess operating procedures and the accuracy of data) and with training and education. These offices will also assist in the identification of resources within the country, and in the establishment of additional collaborative links. As time goes by they should contribute to the cancer control infrastructure of the country in which they are located, thus directly assisting in the building of capacity—yet another component of the longer-term strategy.

INCTR's Clinical Trials Office has gone from strength to strength and is already capable of managing clinical trials in line with the stringent requirements of Good Clinical Practice. Along with the Education Program, it will provide one of the bastions of INCTR's own infrastructure. While the Laboratory Program in Brussels remains rudimentary, this is more than compensated for by the close collaboration with our colleagues in Riyadh.

Finally, INCTR is developing excellent relationships with the corporate and academic worlds, in part through its Associate Membership program. It now has 63 Institutional and Corporate Associate Members (new members are listed in the panel at left). In the future, cooperative groups and professional societies will be able to become Associate Members—as INCTR's own resources expand, it plans to work more closely with such organizations in developing countries. INCTR's Corporate Liaison Committee meets regularly, and the newly established Special Panel of the Advisory Board, comprised of distinguished oncologists and pathologists from developing countries, will provide valuable advice in the coming years.

Antoni Gaudi put all of the creative energies of the latter part of his life into his sacred and symbolic building. Its construction was begun in 1884 and is likely to continue until at least 2020, such that it already spans three centuries. INCTR, in comparison, is still in its infancy, but it is making rapid progress and shows every sign that it will continue to grow and develop long after la Sagrada Familia is completed. ■

New Associate Members

Tang-Ji Hospital of Tong-Ji University, Shanghai, China
Hospital Universitario Del Valle, Cali, Colombia
Instituto De Enfermedades Neoplàsicas, Lima, Peru
Kenya Medical Research Institute, Kenya 001, Kenya
OAUTHC - Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Osun State, Nigeria
PGIMER - Postgraduate Institute of Medical Education and Research, Chandigarh, India
Tygerberg Hospital and University of Stellenbosch, Tygerberg, Germany
Rizk Hospital, Beirut, Lebanon
Kothari Medical Centre, Calcutta, India
Government Cancer Hospital, Indore, India
DETEA - Institute for Experimental Medicine, Istanbul, Turkey
Vasanthal Memorial Trust, Coimbatore, India
Union Hospital of Tongij Medical College, Wuhan, China
B.P. Koirala Memorial Cancer Hospital, Bharatpur, Nepal
DCHRC - Dharamshila Cancer Hospital and Research Center, New Delhi, India
Funcancer - Hospital Universitario, Cali, Colombia
University Hospital of Antwerp, Antwerp, Belgium
Sulakshan Kirti Health Center, Kathmandu, Nepal
Third Hospital Affiliate, Guong Zhou , China
International Society of Gynecological Cancer, Louisville, Kentucky, USA

INCTR ANNUAL MEETING 2002

INCTR's third annual meeting took place at the Hilton Hotel in Brussels between May 29 and 1 June 2002. It was attended by 160 people from 44 countries and included a broad range of professionals involved in the prevention or treatment of cancer as well as policy makers, for example, the Minister of Health of Kuwait, Dr Al-Jarallah, and the Additional Secretary from the Indian Health Ministry, Mr G. R. Patwardhan. Dr Philip Mettens, Chief de Cabinet and Adjutant to the Minister of Scientific Research of the Belgian Federal Government, and Dr Joe Harford, Associate Director of the National Cancer Institute, Bethesda, made opening remarks. The meeting provided both formal and informal opportunities for the exchange of ideas, experiences and perspectives as well as reports of ongoing activities and identification of areas for future endeavors.

Strategy Group Meetings

Several strategy groups met to discuss ongoing or future activities. Strategy groups are comprised of cancer specialists from developing countries and facilitators from INCTR and Associate Member organizations. Invited experts may also attend. Strategy groups have a disease specific focus, and encompass epidemiology, prevention, early detection and treatment. On the day prior to the meeting, the Leukemia Strategy Group, Cervical Cancer and Breast Cancer Strategy Groups met. Both of the latter, being newly formed, held free-ranging discussions which led to the identification of a number of potential areas for collaboration among the participants. From these, feasible areas of collaboration will be selected and developed further in subsequent meetings. At least one meeting for each group is being planned for later this year. At the meeting of the Leukemia Group a new treatment protocol was discussed and the final outline drafted while further plans for more detailed, molecular characterization were made.

Several strategy groups met immediately before or during the Annual Meeting. Shown here, the Breast Cancer Strategy Group.

The Retinoblastoma and Osteosarcoma Strategy Groups as well as the newly formed Lymphoma Strategy Group met in the course of the meeting. The latter was in conjunction with members of the Global Alliance for the Cure of Children with Cancer, a consortium of organizations convened by INCTR to discuss how to coordinate efforts to control childhood cancer, and to ensure that children living in resource-poor regions benefit from available knowledge. The Lymphoma Strategy Group focused specifically on Burkitt's lymphoma in sub-Saharan Africa, since this disease is curable with relatively simple therapy, and accounts for a high proportion of childhood cancer in this world region—once 50%, but somewhat less now, because of the dramatic increase in Kaposi's sarcoma that has resulted from the HIV epidemic. In addition to participants from African countries, representatives from organizations presently conducting collaborative studies in the treatment of Burkitt's lymphoma in sub-Saharan Africa, including the International Society of Pediatric Oncology and the French African Pediatric Oncology Group presented their ongoing projects. Participants from both East and West African countries, including Nigeria, Uganda, Kenya and Tanzania, agreed to develop a clinical protocol for the treatment of Burkitt's lymphoma, and also to participate in a proposed study for the comparison of gene expression patterns in African Burkitt's lymphoma versus Burkitt's lymphoma elsewhere in the world.

Special Panel and Translational Research Committee

Since INCTR's mission is to help build capacity for cancer treatment and research in resource poor countries, it is important that leading specialists from such countries participate in the development of INCTR's overall strategies, and are available to provide

Two "firsts" for this year's Annual Meeting were the Award Lectures and a poster session. Shown here, the audience at the well-attended award ceremony.

advice whenever needed. For this reason, INCTR has established a Special Panel of its Advisory Board to provide advice regarding its programs and projects, including the choice of topics for INCTR's Annual Meeting, and the selection of INCTR special award winners. The Panel met for the first time during the meeting and a number of decisions were made regarding its scope and *modus operandi*. The Panel will assemble every year at the Annual Meeting, but will also give advice throughout the year via e mail or fax communications.

Another new committee, the Translational Research Committee, chaired by Dr Kishor Bhatia, also met for the first time. This committee will provide advice and policy regarding the interface between clinical and laboratory research within the INCTR network. In the first meeting, a discussion was held regarding the scope of the committee and how it can encourage and support translational research.

INCTR Awards and Plenary Sessions

This year, two INCTR awards were made. Dr Shanta was the first recipient of the Gad-el-Mawla Award for outstanding contributions to cancer control by an individual from a country with limited resources and Dr John Ziegler the first recipient of the Paul P. Carbone Award for International Oncology, which is given for outstanding contributions to oncology or cancer research in a developing country by an individual from a resource-rich country. Recipients are invited to give a special lecture outlining their accomplishments. Both recipients gave excellent lectures which clearly demonstrated that a great deal can be accomplished, even in resource-poor settings, when there is a high level of motivation. These awards served both to honor the recipients for their remarkable achievements, and to provide inspiration to the meeting participants. More about these award winners and their work is provided on page 10.

The meeting proper consisted of a poster session, in which authors presented their own work on a broad range of cancer control topics, and plenary sessions for invited speakers who discussed cancers particularly prevalent in developing countries, breast cancer, supportive and palliative care, and new technologies.

Informal Activities

In addition to the planned program, numerous more informal activities took place, and a number of small groups of people met for specific discussions, including new projects in Africa and Pakistan, the status of the Middle East Children's Cancer Association (MECCA), the formation of an INCTR palliative care program and the development of a training course in

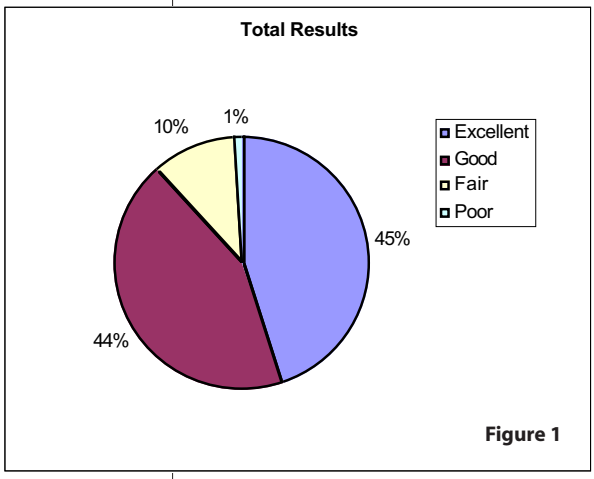


Figure 1

This pie chart shows the Annual Meeting participants' overall evaluation of the poster and plenary sessions.

data management. Meetings with groups of collaborators from Vietnam, Nepal and Boliva were held and discussion of a new project in Burkina Faso was initiated. Discussions were also held with the Minister of Health, Kuwait, the Additional Secretary of Health of India, and Dr Sankanarayanan of the International Agency for Research on Cancer.

Marcela Gutiérrez, a producer from the BBC World Service, interviewed several participants and created a program on cancer control, with particular reference to cervical cancer and childhood leukemia, that was broadcast to Latin American audiences. It also was made available on the BBC World Service's Internet site, Ciencias Noticias. Several participants were interviewed by newspapers from their own countries.

Since the meeting, over 50 messages expressing thanks and commenting on the value of the meeting have been received (see panel) and an additional 20 institutions and one organization have become Associate Members. Throughout the meeting participants were asked to evaluate various aspects of the meeting; an overall evaluation of the poster and plenary sessions is shown in figure 1. The meeting was made the more enjoyable by the excellent organization of GIC Management and the high quality of the service provided by the Hilton Hotel, Brussels - aided by INCTR's able administrative staff. Indeed, overall administration of the meeting was felt to be "excellent" by 85% of respondents and "good" by the remaining 15%. A remarkable 98 and 97% of respondents, respectively, wanted to attend future INCTR meetings and to be informed about INCTR activities. It would seem that the meeting can legitimately be called a success! ■

Comments on the Annual Meeting

"The meeting was very rewarding and allowed us to share our experiences with colleagues." — Dr Zakia Al-Lamki

"The award lectures were very impressive and I returned to my country with a lot of 'take home' messages." — Dr Kamer Uysal

"It was a wonderfully organized event." — Dr L S Arya

"The meeting was very good and we all got to make new friends and meet old ones. I hope we can implement some of the projects we have identified." — Dr Zeba Aziz

"We want to thank you for a well conducted and informative meeting." — Dr Muheez Durosinmi

"The meeting was very good....and it was a very good opportunity for me to meet old and new colleagues from all over." — Dr Adnan Ezzat

"I'm confident that with your help we can improve the quality of care for our poor patients." — Dr Mohamed Harif

"Thank you very much for the valuable invitation to us, Vietnamese representatives from Ho Chi Minh city and Mekong Delta Province." — Dr Tran Chanh Khuoung

"I was rather impressed by the meeting and it was very good for me, especially the strategy groups." — Dr Geoffrey Mutuma, Kenya

"It was my pleasure to be in such an interactive meeting." — Dr Ugur Ozbek

"I did enjoy the meeting very much and I hope I will be able to go to next year's meeting as well." — Dr Margarita Quintero

"I appreciate very much the hospitality the INCTR has offered to all the delegates equally." — Dr Arati Shah

"Your enthusiastic attitudes to many colleagues from developing countries are most sincerely appreciated." — Dr Emal Unal

"The INCTR vision you had is clearly becoming a reality." — Dr John Ziegler

INCTR would like to acknowledge the support of its sponsors: Agfa-Gevaert, Baxter Oncology, IDDI, Lilly, Pharmacia Oncology, Sanofi-Synthelabo and Schering-Plough.

NETWORK

INCTR AWARDS

This year, INCTR introduced two awards that will be presented annually to individuals who have made outstanding contributions to cancer treatment or research in one or more developing countries. The purpose of these awards is not simply to recognize and honor the recipients, although this is certainly an important element, but also to show, by their example, that much can be accomplished even when resources are limited. It is hoped that their work and philosophy, brought, through the Award Lectures at INCTR's Annual Meeting, to a broad audience, will also provide inspiration to cancer specialists in developing countries who often work under conditions of great hardship due to the limitations of available resources.

Each of the awards is named after a distinguished oncologist. They began their careers when there was so little knowledge about the causes of cancer, that people could only live in fear that they would one day be a victim, while the diagnosis was usually hidden from those unfortunate enough to develop cancer because so little could be done for them. It is thanks to the resolution and fortitude of Dr Nazli Gad-el-Mawla, Dr Paul P. Carbone, and others like them, who worked through a time when cancer specialists were often accused of prolonging the misery of cancer victims through their efforts at treatment rather than helping them, that today, at least in the wealthier nations, more than half of those who develop cancer can be cured. Both Dr Nazli and Dr Carbone were responsible for training numerous young people, and so leave us a precious legacy through which their work will be continued.

The Nazli Gad-el-Mawla Award is given for outstanding contributions to cancer control by an individual from a country with limited resources.

Dr John L. Ziegler (right) of the National Cancer Institute, received the first Paul P. Carbone Award. He and Ian Magrath worked together in Uganda, and subsequently at the NCI.

Nazli Gad-el-Mawla was an pioneer Egyptian oncologist, who, as a member of a small group of oncologists working a the National Cancer Institute in Cairo in the 1960s and '70s, helped to build the institute into one of the premier cancer centers in the Middle East. She founded the Department of Medical Oncology in 1970 and, as part of it, developed a strong pediatric oncology programme . She is known particularly for her work in the chemotherapy of cancer of the bilharzial bladder, which accounts for some 25% of all cancer in Egypt, and in hematological malignancies. She was highly respected both by her colleagues in Egypt and also by the international community of oncologists in which she became increasingly active throughout her career.

The 2002 Award is made to **Dr V. Shanta,** who has devoted more than 50 years of her life to the care of patients with cancer in India. She was instrumental, with Dr. Krishnamurthi, in developing the first Cancer Institute in India, for the establishment of the first Cancer Control Programme in India (at Kanchipuram), for the creation of the first separate medical oncology programme in India, and for the recognition and practice of Medical Oncology as a specialty in India. She has held many important national and international positions. She is, for example, a member of the WHO Advisory Committee on Cancer and Convener of the State Advisory Board on Cancer. She has been Chairman of

(continued on page 12)

MY ENCOUNTER WITH CANCER

My encounter is a narration of the origin of the Cancer Institute (WIA), Chennai, founded in 1954 by a non-governmental voluntary social organization, the Women's Indian Association Cancer Relief Fund in an environment of total official apathy and public ignorance about cancer. It highlights the evolution of cancer care at the Institute through 1954-2002, the growth of a cottage hospital, located in small huts, to a Comprehensive Cancer Centre with a hospital of 427 beds, a research centre, a College of Oncologic Sciences and a Center of Preventive Oncology. It also deals with aspirations for the future of the Institute.

The major problem faced in 1955 was the desperately advanced loco-regional cancers, the common cancers being oral cavity, cervix and breast. The observation of the centripetal contraction of the malignant zone" after radio therapy led to the introduction of the *concept of a multimodal approach* in cancer management. Pre-operative radiotherapy followed by surgery could reduce the size of over 50% of locally advanced oral and breast cancers such that they became surgically operable, resulting in an enhanced 5 yr. disease-free survival. In view, however, of the limited applicability, a series of controlled clinical trials was begun in 1960, to study the possibility of chemo-sensitization of radiation response. These trials did document benefits but seemed, in practice, to touch only the fringe of the problem.

The crux of the problem was early detection. The first Cancer Survey in India, in Chingleput underscored the urgent need for cervical cancer screening. As a non-governmental organisation, the Institute had to go through considerable toil and labour to establish the first WHO Cancer Control project, funded by NORAD, in Kanchipuram in 1969.

The rapid progress the world over from the mid-60s, including the introduction by DeVita of multi-drug chemotherapy in Hodgkins Disease in 1969, also saw the introduction of the first medical oncology unit in India, at the Institute, in 1971. The Indo US Collaboration began in 1976 after a chance meeting with Dr Ian Magrath, when I visited NCI to discuss the contrasting results in pediatric ALL in the Caucasean and Asian children. It started with the introduction of a protocol for pediatric acute lymphoblastic leukemia (MCP 841) at the Institute and later extended to other centers in India. The collaboration has shown significant enhancement in survival in pediatric ALL and also highlighted the differential patterns of leukemia sub-types.

Medical oncology ushered in a new era in cancer care. Adjuvant and neo-adjuvant chemotherapy led to the a significant enhancement in survival in breast cancer, in all pediatric malignancies, in testicular tumors, and made limb conservation possible in Osteosarcoma. Every one of these state-of-the-art therapies is provided irrespective of socio-economic class.

The concept of a multi-modal approach to cancer care, and the increasing role of medical oncology in enhancing survival stressed the need for specialized oncology personnel. It took us over 10 years to get the concept of oncology accepted by the Medical Council of India and the first super speciality training in medical and surgical oncology was introduced at the Institute in 1984.

Dr V Shanta

It is hard to convince the bureaucrats that a hospital and laboratory are indivisible parts of a whole. Organizing an oncologic research laboratory in a developing environment was a hard task. Despite these obstacles, the Institute has built a modest research centre. We look forward to contributing to a better understanding of cancer in our collaboration with INCTR and the developed world. It has been a long and arduous journey but we see no end to it because there is so much to be done.

Looking back 48 years ago, the story of cancer was a dismal one, a diagnosis of cancer was a virtual sentence to death. A desperate patient was treated by an equally pessimistic physician. The horizon has certainly changed. The Institute has provided state-of-the-art diagnosis and therapeutic facilities to the poorest of the poor in the country.

I wish to record my deep appreciation and gratitude to Dr Ian Magrath for all that he has done for the Institute and for inviting me to deliver the first Nazli Gad-el-Mawla Memorial oration. It is an honor conferred on the Institute. ■

(continued from page 10)

the INDO-US Collaborative Group on Lymphoid Neoplasias (Indian Chapter), member of many Committees of the Indian Council for Medical Research, member of the ICMR Task Force on Registries and member of the Syndicate of the Anna University. She was President of the Indian Society of Oncology (88-90), President of the Asian & Pacific Federation of Organisations for Cancer Control (97-99) and President of the 15th Asian & Pacific Cancer Conference (1999). She has participated in a number of Scientific International Collaborative Programs. She has won 26 awards for her contributions to advances in the management and control of Cancer, and was was the recipient of the Indian national award, Padma Shri, in 1986 and an honorary doctoral degree in 1997 by the Shri Venkateswara University, Tirupati, Andhra Pradesh. By her example and work she has played a critical leadership role in the evolution of the practice of oncology in India, and through this, and the training of many young oncologists, has helped to ensure that the future of oncology in India is bright.

Dr Advani, chief of the medical oncology department at the Tata Memorial Hospital, Mumbai, India, speaks with Dr Magrath.

The Paul P. Carbone Award in International Oncology is given for outstanding contributions to oncology or cancer research in a developing country by an individual from a resource-rich country. Paul P. Carbone was a pioneer American oncologist, who, as the Associate Director for the Clinical Oncology Programme at the National Cancer Institute, Bethesda, played a critical role in the development of cancer chemotherapy. Subsequently, he continued his work as the Director of the Cancer Center at the University of Madison, Wisconsin. From the beginning, he recognized not only the needs of patients in developing countries, but also the contribution that scientific research conducted in such countries could and should make to the global efforts against cancer. Dr Carbone's family have established the Paul P. Carbone MD Foundation for "the support of scientific, educational, and charitable endeavors that reflect Dr. Carbone's practice of the art and science of oncology and his lifelong dedication to teaching and mentoring."

The 2002 award is made to **Dr John L. Ziegler,** who joined the National Cancer Institute, Bethesda, in the mid 1960s. Shortly after, with the help of Dr. Carbone, he founded the Uganda Cancer Institute at Makerere University in Kampala, which brought much needed emphasis to cancer treatment in East Africa. Dr Ziegler's work on the chemotherapy of African Burkitt's lymphoma resulted in significant improvements in survival rates, and led the way to the cure of this disease in the USA and Europe. Indeed, Dr Ziegler was also a pioneer of the treatment of this disease outside Africa, becoming Chief of the newly established Pediatric Oncology Branch at the National Cancer Institute in 1972 and publishing several important papers on the chemotherapy of Burkitt's lymphoma in the United States. He subsequently became Associate Director for Clinical Oncology and Editor of the Journal of the National Cancer Institute. In 1981 Dr Ziegler joined the University of California, where he took up research on HIV and malignancy, and made several important observations, amongst them the demonstration of the predisposition to lymphoma by HIV. Subsequently, he conducted studies on Kaposi's sarcoma, again in Uganda. Most recently, Dr Ziegler has directed the Cancer Risk Program (genetic counseling and testing) at the UCSF Cancer Center. Dr Ziegler is a recipient of the prestigious Lasker Award. His important work in Africa led not only to the cure of many African children with this disease, but also demonstrated that research in developing countries may have far reaching implications.

CLINICAL RESEARCH IN UGANDA: PARTNERSHIPS IN PROGRESS

It is a great honor to be the first recipient of the Paul P. Carbone Award in International Oncology. Paul was my mentor, professional collaborator, and good friend for over 35 years. His untimely death in February this year was a tremendous loss for oncology, for his family and for his many admirers worldwide. Paul epitomized the complete physician-scientist. He was first a visionary, anticipating important advances and stimulating colleagues to explore new areas. He was an exemplary doctor, compassionate, involved, and dedicated to his patient's wellbeing. Paul was a committed teacher, writing papers, guiding students, and lecturing internationally. Finally, Paul was a leader, inspiring the formation of new institutions, cooperative groups and oncology programs. Although he received many awards and honors, Paul was known for modesty and understatement. In my talk today, Paul's influence figures prominently, as his special passion was in encouraging clinical research in developing countries. I shall try to place his many contributions in the proper perspective.

I also wish to pay special tribute to my colleague and long-time friend, Dr. Nazli Gad El Mawla, whose memory is also being honored today in the form of a memorial Award. Nazli's loss was a great blow to oncology in the Middle East. She was a pioneer of cancer chemotherapy in Egypt, and a strong advocate of cooperative clinical research in developing countries. With characteristic humility, she set about to advance our knowledge of the chemotherapy of bladder cancer and lymphoma in Egypt. Despite limited resources, her contributions to the field were impressive. Nazli's premature passing has left a void; fortunately, her many students will follow the path she has opened.

My own introduction to cancer in developing countries began in 1964 as a house officer at Memorial Hospital in New York City, where I cared for a young girl with Burkitt's lymphoma (BL). Although she had a dramatic remission following cyclophosphamide, she died. My teachers, Dr. Joe Burchenal and David Karnofsky were astonished by the extraordinary tumor responses and believed that careful study of BL would be instructive for other malignancies. At the National Cancer Institute (NCI), Dr. Gordon Zubrod and Paul Carbone were similarly impressed, and in 1967 I was given the opportunity, by NCI, to set up an investigative unit in Kampala, Uganda, to study BL in endemic setting.

The creation of the Uganda Cancer Institute with our counterparts at Makerere University in Kampala, Prof. Sebastian Kyalwazi, Prof. Ian McAdam, and many others, started my lifelong career in oncology. The lessons we learned from the study of BL were many, including the strategy of tumour debulking, treatment of meningeal disease, the use of drug combinations, the recognition of tumour lysis syndrome, and the importance of patient follow up. We also learned much about multifactorial aetiology (roles for EB virus and malaria) and tumor immunology. Many of these research ideas came directly from Paul Carbone. Most importantly, we learned the value of partnerships with scholars from the host country. Through educational exchanges, Ugandans came to Sweden, UK and the USA for further training in oncology, and Makerere University hosted many medical and graduate students from abroad. The Institute staff taught in the Medical School and participated in local, regional and national conferences.

John L. Ziegler

Our bilateral exchanges paid rich dividends, as the Uganda Cancer Institute survives today, having weathered 15 years of civil unrest during the 1970s and 80s. Today, the Institute is fully staffed and funded by the Government of Uganda. It is the only dedicated oncology unit in sub-Saharan Africa, and it has been internationally recognized in its contributions to cancer and AIDS research. If Paul Carbone were here today, he would be immensely proud of the accomplishments and legacy that began with his vision and inspiration. ■

NEWS

New Staff

INCTR welcomes two new staff members. Jean Schlusselberg and John Langenaeken have joined the Clinical Trials Office—Jean as a Medical Consultant and John as a Clinical Data Manager.

Volunteers

INCTR wishes to thank its devoted volunteers for their continuing outstanding support. Hillary Wallace has provided valuable assistance to the PR Department. Sandra Jackson has done an excellent job in helping to organize INCTR educational programs. Caroline Houard has taken on the responsibility for the mailing of *Network* to our recipients around the world.

Travel

Dr Magrath, Melissa Adde and Jean Schlusselberg attended a meeting in Barcelona on March 18 -20 relating to a clinical trial in locally advanced cervical cancer in 10 different countries that will be sponsored by Eli Lilly.

Corporate Liaison Committee Meeting

A meeting of the Corporate Liaison Committee took place on 29 April. Dr Udo Müller and Dr Wolfgang Ham from Baxter Oncology were in attendance along with Dr Frans Dhaenens of Agfa Gevaert. Discussions were held regarding sponsored workshops on Good Clinical Practice, following the meeting on Clinical Trials Management recently held in Beijing (see last edition of *Network*), which was sponsored by Eli Lilly. Dr Müller mentioned that Baxter has a "Good Citizenship" program and expressed interest in participating in the sponsorship of such workshops. He also raised the issue of the identification of available and needed resources for cancer treatment in developing countries, mentioning that a compilation of such information would be valuable in many different ways. This is entirely consistent with INCTR's view. Dr Ham described a number of studies carried out in advanced cervical cancer using ifosfamide, which appears to be a valuable agent in this disease. Dr Dhaenens raised the possibility of developing a program in education pertaining to the role of information technology in the care of patients with cancer. These topics will be further discussed at future meetings.

News from INCTR (USA)

The US Branch of INCTR, in follow-up to its planning meeting in Miami and the discussions held during the most recent Annual Meeting, is attempting to initiate a series of programs in Latin America for the management of cervical cancer. These include efforts at improved screening and early diagnosis, including a model for a single visit for screening and required follow-up, as well as the introduction of combined modality treatment for locally advanced stages of disease. Five Phase II randomized clinical trials have demonstrated a significant survival advantage for cisplatin-based therapy given concomitantly with radiation therapy. This has resulted in a formal recommendation by the National Cancer Institute (US) that strong consideration must be given to the incorporation of such regimens into future treatment strategies. As combined modality therapy is not yet available in most Latin American Centers, this would improve the current management of cervical cancer. A sample protocol has been developed and circulated to prospective investigators. The US Branch would provide the expertise required to train the Latin American investigators with respect to combined modality therapy, and would facilitate communication between investigators in Latin America and those in the headquarters in Brussels, which would have ultimate responsibility for such trials.

In addition, models for collaboration in pediatric clinical research and care between specific institutions in North American and in Latin America, in cooperation with cooperative groups, are now under review by Prof. Ronnie Barr.

LETTERS TO INCTR

INCTR solicited information from Retinoblastoma Strategy Group Members about their activities in trying to improve the early diagnosis of retinoblastoma. Here are some of the replies.

Dear Dr Magrath,

First of all I would like to congratulate you on the success of the newsletter, it is indeed very informative and very well composed, particularly the president's message. The quotations and information provided in the panels are wonderful and can be used for teaching purposes. You must be working very hard to collect all this material, and to use it to create such a wonderful newsletter.

With regard to our activities in retinoblastoma, we have been running a regular retinoblastoma clinic in which ophthalmologists, radiotherapists, pediatricians and other professionals sit and discuss each case. This

has helped us to bring down the stage of the disease at diagnosis and the severity of the disease at the time of presentation. We are planning to run a short advertisement on the radio and on TV channels which attract the largest audiences. We are also about to bring out a brochure which would be distributed to various hospitals and private clinics to make the general practitioners more aware of retinoblastoma and to help them make an early diagnosis of the disease.

L. S. Arya
Dept of Pediatrics
All India Institute of Medical Sciences
Delhi, India

Dear Dr Magrath,
We find that one of the main reasons for the late presentation of children with retinoblastoma in India is because the ophthalmologist/pediatrician tells the parents that "enucleation (removal) of the eye" as the only treatment option. Naturally, few parents accept this and most then take the child to people practicing "Alternative Medicine" and finally come to the cancer hospital only when there is extensive proptosis (bulging eye) and/or disseminated disease. So at present we are targeting the ophthalmologists by giving lectures and presentations at various ophthalmological meetings.

At the same time pediatricians are targeted through the "SIOP initiative" (workshops for pediatricians to provide basic information about pediatric oncology). After this we plan to target the parents directly through brochures and announcements via public media such as TV channels and newspaper advertisements. The information provided will make them aware of the fact that they should take their child to see an ophthalmologist if the child has a white eye reflex or squint.

We hope that we are successful in this undertaking, since India is a country where the incidence of retinoblastoma is more than in the industrial countries, where retinoblastoma is more common in children in lower socio-economic strata, and where most children present with advanced disease.

Shripad Banvali.
Department of Medical Oncology
Tata Memorial Hospital
Mumbai, India

Dear Dr. Magrath,
Here is briefly what we have done to encourage early diagnosis here in Santa Cruz in the last year:

1. We have been appearing in a TV program directed to women, talking about early diagnosis in children with cancer, including retinoblastoma.

2. We have a space once a week in a program broadcast via the University TV channe

3. Some radio programs have been also done, but not on a regular basis.

4. Dr Yolanda Ernst has traveled to cities near the frontier, far from Santa Cruz, and given information about early diagnoses to physicians that work in these rural areas.

5. We have already contacted most of the ophthalmologists in town and had several meetings to speak about early diagnosis and referral of children with retinoblastoma.

6. Every September, there is an International Fair/Exhibition in town and we had a special stand where last year we gave out 7,000 pamphlets about early diagnosis of retinoblastoma, including pictures of patients, to the visitors.

Raquel Bravo
Dept. of Pediatric Oncology
Instituto Oncologico del Oriente Boliviano
Santa Cruz, Bolivia

Dear Ian,
Since our first retinoblastoma meeting where we discussed strategies for early diagnosis of intra-ocular tumor, we have developed a campaign in Brazil for the early diagnosis of retinoblastoma. The cat's eye reflex is not well-known by the general public, or even by ophthalmologists and pediatricians. The main educational tool is a film in which we will show the appearance of the cat's eye reflex—an early sign of retinoblastoma that can also be seen in flash photographs. The film will also be translated into other languages and made available to people in other countries who might like to use it. We have already had several requests. We also plan to send cards with photographs of children with the cat's eye reflex to doctors and to prepare a booklet for new mothers.

Once this campaign is underway, we will try to introduce the concept of performing fundoscopy (looking inside of the eye with a simple instrument) for all children at approximately one month old. If obliged by law in Brazil, as is a test for another rare disease called phenylketonuria, nearly all cases would be detected early.

Sidnei Epelman
Dept. of Pediatric Oncology
Santa Marcelina Hospital
Saõ Paulo, Brazil

RETINOBLASTOMA: LOS PROBLEMAS SOCIALES NO SE CURAN CON QUIMIOTERAPIA

Carlos Leal, Mexico 2002

El Retinoblastoma es la neoplasia sólida más frecuente en la infancia. Se presenta en los países en vía de desarrollo con más frecuencia que en los países desarrollados, sin que aún se pueda explicar porqué. Esta neoplasia es congénita, y puede manifestarse desde el nacimiento. Sin embargo, en México, el diagnóstico se lleva a cabo alrededor de los 3.5 años de edad. En el Instituto Nacional de Pediatría diagnosticamos de 40 a 50 nuevos pacientes por año, casi la mitad de los casos se presentan en estadios avanzados (orbitarios y metastásicos). Uno de nuestros problemas más importantes ha sido el abandono del tratamiento, el cual ocurría hasta en un tercio de los casos. Actualmente éste es del 4% debido a varias medidas que hemos tomado, como es el patrocinio económico para la estancia del paciente en la ciudad de México así como la adquisición de la quimioterapia y apoyo psicológico personalizado - explicando la gravedad del problema y las posibilidades de éxito de la terapia, si existen.

Un cartel utilizado en Brasil para informar a padres acerca de "ojo de gato."

Desde 1997, tratamos a los pacientes en estadios no avanzados (incluso pacientes con extensiones de tumor en las láminas del ojo profundo a la retina) sólo con vigilancia oncológica, es decir, sin quimioterapia, con un índice de recaída de 2 de los 50 casos evaluados. Hace 2 años iniciamos el salvamento de ojos que al diagnóstico fueran susceptibles de llevarlo a cabo. Iniciaron con esquema de Carboplatin/VP16 o Carboplatin monodroga más terapia local (radioterapia o laser). Los resultados son preliminares; sin embargo, nuestro índice de éxito está alrededor de un 50%.

Tratamos los estadios orbitarios con quimioterapia - Carboplatin y VP16 sin quimioterapia intratecal + radioterapia orbital con una dosis de Carboplatin menor a la utilizada en otras series. Hemos obtenido una sobrevida libre de enfermedad de un 80% para estos pacientes.

En los estadios metastásicos, tenemos experiencia con 81 casos tratados en 21 años con diversos protocolos de quimioterapia desde el clásico vincristina + ciclofosfamida hasta ICE o Platino en vez de Carboplatin + Taxol. Todos estos casos han presentado una respuesta inicial completa de la enfermedad metastásica. Sin embargo, de 4-10 meses después, todos los pacientes recaen al sitio primario a pesar de haber consolidado con radioterapia a dosis habituales. La explicación que tenemos sobre esto es la alta resistencia que logra la enfermedad cerebral a los agentes utilizados actualmente.

Haz visto una luz blanca en el ojo de tu hijo?

Sin duda alguna, el objetivo más importante para los países en vías de desarrollo es el diagnóstico temprano, ya que cuando los pacientes acuden a un centro para ser tratados, la enfermedad suele estar ya en estadio avanzado y es por lo tanto mucho más difícil de curar. En un estudio no publicado aún, el 90% de nuestros pacientes solicitó ayuda médica profesional, recibiendo información o medidas distintas de las que nuestros enfermos necesitaban. Si bien la población no cuenta con la información médica suficiente para conocer del tema, es también cierto que tanto el médico de primer contacto como el estudiante de la escuela de medicina no saben del tema.

Así como los médicos auscultan un posible soplo cardíaco en todos los recién nacidos, el cual tiene una frecuencia similar o más baja que la de todas las anomalías perinatales que pueden observarse en el ojo de los recién nacidos o lactantes, habrá que recordar a los médicos la técnica ideal para la exploración del ojo bajo dilatación pupilar y hacer hincapié de la nula toxicidad de la aplicación de estas gotas. Debemos inculcar el

hábito de llevar a cabo esta investigación tan simple tal y como se ausculta el corazón de un lactante o se revisa la cadera del mismo.

El retinoblastoma es el único cáncer conocido para el que, cuando se diagnostica en etapas iniciales, se cura en el 100% de los casos con un alto porcentaje de preservación de la visión. Pero también es un cáncer que en estadios avanzados presenta una mortalidad del 100% de los casos sin cura alguna.

Las campañas de diagnóstico temprano de la entidad son una obligación del estado como de la sociedad misma, donde los medios de comunicación tienen la obligación social de informar de los signos de alarma como el "ojo de gato", así como de los sitios en los que se puede tratar de forma adecuada esta enfermedad.

Si se analiza detenidamente, el presupuesto que se requeriría para la difusión de estas campañas es con mucho menor al que se utiliza para radiar y administrar quimioterapia a un grupo de chicos con la enfermedad, amen del costo social que esto representa y el costo en términos de toxicidad al paciente.

El retinoblastoma diagnosticado en etapas tardías representa un problema social, el cual no es tan fácil de solucionar sólo con tratamiento oncológico. ■

A VOTRE BON COEUR!

L'appel du Dr Banavali du Tata Memorial Hospital en Inde n'aura pas été vain! L'AMCC est heureuse de pouvoir signaler aux lecteurs francophones de la Newsletter que sa collecte de fonds printanière à été un franc succès. Elle a ,dors et déjà, permis de récolter suffisement d'argent pour acheter 50 oeils de verre pour les enfants atteints du Rétinoblastome. Rappelons, pour les non initiés, que ce type de cancer se rencontre principalement dans les pays en voie de développement. Il touche généralement les enfants de moins de 5 ans. La manifestation curable de la maladie se présente par une tumeur de l'oeil. Si la tumeur est détectée à temps, l'oeil peut être sauvé. Quand la famille du petit patient se présente plus tardivement à l'hôpital le médecin doit malheureusement envisager l'ablation de l'oeil atteint. Une opération qui permet une rémission totale de la maladie. Seul l'achat d'un oeil de verre, rendu possible grâce aux dons, et son placement dans la cavité oculaire permettront à ces jeunes enfants de retrouver toute leur place dans la société Indienne. C'est pourquoi l'AMCC désire poursuivre et étendre son action auprès de ses donateurs afin de rendre l'espoir à ses jeunes amis atteints par cette terrible maladie.

L'Alliance Mondiale Contre le Cancer -AMCC- est l'émanation française de l'International Network for Cancer Treatment and Research . L'automne dernier les membres du Comité Exécutif de l'INCTR ont élu à l'unanimité le Professeur Guy de Thé, Vice -Président de l'INCTR, à la tête de cette « association autonome 1901 ».

Le Professeur de Thé a décidé, en accord avec l'INCTR, de centrer le programme et les actions futures de l'AMCC sur les pays en voie de développement de langue et de culture francophone. Principalement sur les pays africains où les femmes et les enfants sont si durement touchés par les problèmes de santé. L'AMCC n'oubliant pas pour autant d'autres régions du globe aussi défavorisées.

Les programmes qui vont être développé prochainement en Afrique de l'Ouest avec le soutien logistique de l'INCTR entre dans ce cadre. Ils seront coordonnés par « l'Alliance » et intégrés dans les activités internationales de l'INCTR.

L'AMCC devrait également profiter et participer au développement du réseau de médecins créé par l'INCTR qui permet dès à présent la mise en place de programmes de prévention et d'essais thérapeutiques adaptés aux pays en développement.

L'AMCC visera aussi la recherche dans le domaine de la prévention ainsi que de la mise en place de traitements des cancers chez l'enfant et la femme.

C'est en collaboration avec le bureau de Londres de l'INCTR que l'AMCC compte parrallèlement développer la formation des infirmières dans ces régions du monde particulièrement défavorisées.

La première action concrête de l' Alliance Mondiale contre le Cancer a déjà permis de recueillir des fonds en France lesquels ont étés utilisés pour acheter des yeux de verre prosthétique pour 50 enfants indiens traités et guéris d'un cancer appelé rétinoblastome.

Le Professeur Guy de Thé espère vivement que cette première collecte de fonds puisse être répétée et ses bénéfices étendus à d'autres centres Asiatique et Africain. ■

THE SHAUKAT KHANUM MEMORIAL CANCER HOSPITAL & RESEARCH CENTRE

In the 1980s there was no health facility devoted specifically to the diagnosis and treatment of cancer in Pakistan or the surrounding region. A tragedy was the catalyst for thea development of such a center, The Shaukat Khanum Memorial Cancer Hospital & Research Centre in Lahore.

Mr. Imran Khan, the internationally famous cricket player, like most people, had no personal experience in the care of terminally ill patients; he was appalled by the poor diagnostic facilities and absence of palliative care when his mother lay dying of cancer. He realized that if such a paucity of services were available to his mother, who was certainly able to afford the best possible facilities, the situation must be much worse for the average poor person in Pakistan. From this arose his determination to build a modern institution to provide cancer services to all patients *regardless of ability to pay*. Today the Shaukat Khanum Memorial Cancer Hospital & Research Centre, named after Imran's mother, stands as a model of state-of-the-art tertiary cancer care in the region.

Land was donated for the hospital on the outskirts of the large city of Lahore (estimated population: seven million) in the southern Punjab province. The hospital was planned and developed by Dr. Nausherwan Burki, Professor of Medicine at the University of Kentucky Medical Center, in Lexington, Kentucky, USA, an expatriate Pakistani with strong ties to his home country. Dr. Burki recruited a health care architectural firm from Louisville, Kentucky, Arrasmith, Judd & Rapp, Inc. and over a period of eight months in 1990 developed a master plan for a hospital at the site in Lahore. The master plan envisages three phases for the development of the hospital over a ten-year period.

A new hospital and cancer research center in Lahore, Pakistan, was built with private funds and collaboration between medical personnel in Pakistan, Britain and the USA.

Because accurate data on the incidence and prevalence of cancer was not available for Pakistan, much of the initial hospital planning had to be based on estimates. Thus it was estimated that during Phase I the hospital should be able to cope with approximately 20,000 outpatient visits a year, and provide inpatient services to approximately 60 patients at any given time. During planning, it became apparent that expatriate help would be necessary for hospital administration as well as for nursing administration; on the other hand, very high-quality medical personnel of Pakistani origin practicing in Pakistan, Britain, and the USA provided a readily available reservoir of medical expertise.

As Imran Khan undertook an extensive fundraising campaign in Pakistan, Europe and the USA, building began in 1991. The building meets the stringent requirements of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the USA hospital accrediting agency. In Phase II the hospital will be expanded to accommodate 150 inpatients and in Phase III will expand to 250 inpatient beds, with concomitant expansion of outpatient and ancillary facilities.

Current Operations

The hospital opened in December 1994, and in the first year registered 8, 600 patients, of whom 5,200 were cancer patients. The hospital provides modern diagnostic facilities in the pathology (including immunohistochemistry, fluorocytometry, etc), radiology (MRI and CAT scanning, stereotactic breast biopsy, etc) and nuclear medicine departments, and

the latest treatment facilities in adult and pediatric oncology, including radiation medicine. About 48 outpatient chemotherapy treatments are provided daily.

A crucial feature of any cancer hospital is the blood bank services. The hospital was the first institution in the region to provide blood component products. Donated blood is screened for hepatitis B & C, syphilis and HIV; it is of interest that of approximately 25,000 samples screened to date, none has been found to be HIV positive, reflecting the very low incidence of HIV in Pakistan.

A cancer registry has been developed, which currently has nearly 20,000 patient entries. The hospital registers about 3,500 new patients annually, of whom 89% are adults, with an equal balance between men and women. It is planned to collaborate with other institutions and organizations to develop a population-based cancer registry.

The catchment area for the hospital includes not only all of Pakistan, but also Afghanistan, Central Asia and the Gulf States who are beginning to avail themselves of the hospital services. In its first seven years, the hospital has had a major impact on cancer awareness in the region and on hospital management services.

Education

A major objective of the hospital is to provide education in all aspects of hospital function—administrative, nursing, technical and medical. Accordingly, continuing medical programs are in place, with nearly 40 medical housestaff in training. Courses are offered in advanced cardiopulmonary life support (ACLS) not only for the hospital staff but also for outside physicians.

At the inception of the hospital, the area of greatest concern was the quality of the available nursing services. Therefore, training programs were developed whereby nurses undergo a rigorous classroom and bedside teaching program , in spite of the fact that they are already licensed. As a result, the hospital now has a cadre of highly trained chemotherapy nurses as well as nurses with expertise in intensive care, operating room services, etc. The hospital was instrumental in establishing a diploma training program in oncology nursing, approved by the Pakistan Nursing Council, and currently has six nurses enrolled in this one-year program.

Hospital technical expertise was also highly deficient in Pakistan; the hospital undertook to train college graduates as technicians in the pathology laboratory, in radiology and nuclear and radiation medicine, as well as in respiratory therapy and modern hospital pharmacy services. The hospital is proposing to provide its own diplomas in these areas to the technicians it trains and it is now ready to accept trainees from outside the hospital. The pathology lab subscribes to the American College of Pathology quality control program, providing results that can be accepted with confidence by the physicians and community.

Public education by means of lectures, newspaper articles, and open hospital days are planned to increase cancer awareness in the region.

Research

The hospital has undertaken a number of clinical studies that have been presented at international meetings; in addition, a collaborative project examining the genetics of breast cancer has been initiated with the German National Cancer Research Center and is likely to bear fruit in the next few years. The hospital welcomes joint research projects, both basic and clinical, with any interested research workers or institutions.

Charitable Status

The most important aspect of the institution is the fact that it is run entirely on charitable donations and yet is able to provide cancer diagnosis and treatment at a level rivaling that available anywhere in the world. For this, the hospital runs fund-raising programs both within and outside Pakistan. To date, approximately $60 million has been donated by millions of people, permitting the hospital to provide totally free treatment to the majority of its cancer patients. In its first year, 89% of patients received absolutely free treatment and services; this figure has now dropped to approximately 68%, with the rest of the patients contributing in various amounts to the costs of their diagnosis and treatment.

The hospital has been intimately involved with the INCTR from its inception, and has been represented at every annual meeting of the INCTR. Plans are underway to strengthen this association and to use the expertise and assistance of the INCTR to further develop cancer services in the region; the hospital plans to open its training facilities to the region in collaboration with the INCTR.

Under the guidance of the Board of Governors and the Hospital Director and CEO, Mr. Rod Bull, and Medical Director, Dr. Faisal Sultan, the hospital looks forward to continuing to develop its cancer diagnostic and treatment facilities and research, while providing education in all aspects of hospital function and cancer care to people within Pakistan and in the region. ■

PROFILES IN CANCER MEDICINE

A DOCTOR'S DOCTOR

There are many powerful arms in the world's cancer-fighting arsenal, but for Lt. General Manzoor Ahmed, his chosen field of pathology is an essential foundation to the understanding of cancer and thus to the forging of more effective weapons to use against it.

The former commandant at Armed Forces Institute of Pathology and the retired Surgeon General and Director of General Medical Services for the Pakistan Armed Forces, General Ahmed has devoted his career to teaching, research and advancing the prospects of cancer treatment in the developing world.

Trained at King Edward Medical College in Lahore, Dr Manzoor completed his residency training at the University of Maryland in the USA and obtained American board certification in pathology. In 1960 he returned to Pakistan, where he became head of pathology at the Pakistan Naval Hospital. He later led the anatomic pathology department at the Armed Forces Institute of Pathology (AFIP), where he taught postgraduate students and conducted research with special emphasis in the areas of cancer epidemiology and lymphomas.

One of his first initiatives was AFIP's cancer registry-a monograph he published which describes the frequency of various tumors in Pakistan. Certain lymphomas and leukemias are very common, in addition to breast, cervical, gall bladder and lung cancers. What was rather unexpected for a developing country, Manzoor says, is the high incidence of colon cancer. "More interestingly, these cancers do not begin as polyps as they do in western countries," he says. "This needs to be further studied."

Manzoor also has identified regional connections to some types of cancers: a high frequency of esophagal cancer around Caspian City; cancer of the mouth in the southern part of the country, attributable to chewing habits and tobacco use; lymphomas and leukemias in impoverished regions. Malnutrition, immune systems depressed by viral and bacterial infections, and lack of clean water are all factors contributing to the incidence of lymphomas and leukemias. The challenge, he says, is not only to address these contributing factors, but to devise treatments commensurate with the economic realities of the region.

"We have completed a lot of research, we have a lot of good medicine in Pakistan, but most people don't have the resources to take advantage of this," he says. "People cannot afford the treatment protocols we are supposed to be carrying out. More than half of those diagnosed with lymphoma were getting insufficient treatment or no treatment at all. The end result is the same: the majority of people with cancer will die."

To help ease the financial burden of cancer, Manzoor and his colleagues are streamlining their approach to diagnosis and treatment, and aiming for earlier detection. "We try to cut down on the number of investigations we make to distinguish between aggressive and less-aggressive cancers, which one has to pursue to prescribe the proper treatment. We also try to cut down on the number of biopsies performed by using the less-costly fine needle aspiration of the large lymph nodes for diagnosis. Tuberculosis is a very common disease in our country, and fine needle aspiration is the standard means of diagnosis. If something more time- and cost-efficient is applicable in our setting, then we really ought to use it."

A member of INCTR's advisory board, Dr Manzoor has long understood the importance of international collaboration. He was the principal investigator for a collaborative research project between the National Cancer Institute, Bethesda, and the AFIP on lymphoid neoplasia.

When Manzoor first started practicing medicine in Pakistan, medical interest in cancer was limited, and pathologists were few and far between. Forty years later, he is witnessing a gradual shift in perspective. The country's medical attention is still largely focused on infectious diseases, and facilities for diagnosis and treatment of cancer are limited, but Manzoor and his colleagues are making strides to raise awareness that cancer could be Pakistan's major health concern in the coming years. He advocates better organization, education and information as the keys to combating cancer in the developing world. ■