



INCTR Brussels and INCTR UK Challenge Fund

Development of a Model of Care for Burkitt Lymphoma in Africa

BACKGROUND INFORMATION

There are very few specialists able to diagnose and treat cancer, limited numbers of nurses trained in oncology care and a largely rural population (80%) with poor access to medical care. Burkitt lymphoma (BL) has an incidence of 4 per 100,000 children and accounts for approximately half of all childhood cancer in equatorial Africa. BL is a cancer that has been shown to be curable in these countries with relatively inexpensive chemotherapy alone. BL is highly sensitive to chemotherapy, but does not require radiation therapy or major surgery for effective therapy. Although BL is a very rapidly growing tumor, that untreated, leads to death within a matter of months, is potentially curable and can be treated in any center where doctors and nurse have been trained in the care of such patients. It provides, therefore, an excellent model, which can be used to convince policy makers that cancer is worthy of more attention as a health problem.

INCTR's strategy in addressing this problem is to use a cancer that we have already shown to be curable with appropriate therapy, and to increase the survival rate even more in BL, thereby demonstrating that cancer is not intractable and that there is much that can be done by even the lowest income countries to control it.

INCTR's current and on-going study on the treatment and characterization of BL in Africa has demonstrated that over 60% of patients can be cured using simple chemotherapy that is feasible to deliver in the context of the present resources for cancer care in Africa and also affordable, when health care coverage for cancer patients is not provided for, especially in the rural populations where this disease is most prevalent and there is much poverty. The results of INCTR's initial study with its African colleagues were published in the British Journal of Hematology (2012) and considered a benchmark against which the results of future studies can be measured.

INSTITUTIONS

- St. Mary's Hospital Lacor, Gulu, Uganda
- Bugando Medical Center, Mwanza, Tanzania
- Obafemi Awolowo Teaching Hospitals Complex, Ile-Ife, Nigeria

OBJECTIVES

- To improve the access to care of patients with BL in selected regions in two East African countries, through the establishment of regional networks including all levels of care.
- To improve the survival rate of BL at a population level in the demonstration regions through the application of lessons learned from the previous INCTR project carried out in Africa.
- To develop a training program for health workers to be conducted in concert with patient care.
- To develop a culturally relevant public awareness program about BL.
- To ensure the sustainability of the program, financially, medically and academically (including the cultivation of a research ethos).

METHODS

- Establishment of a network of primary/secondary health centers with tertiary centers
- Design and implementation of a plan to educate primary and secondary providers about BL including referral procedures
- Design a modified treatment protocol for BL patients to further improve results upon the earlier study and assess its efficacy with respect to outcome



- Provide initial and on-going training in the diagnosis and the conduct of the treatment of BL to health care providers
- Evaluate the effectiveness of the network
- Evaluate the quality of data collection and identify strategies to improve data quality
- Develop a certification program to improve skills in diagnosis and treatment of BL
- Develop locally sustainable support for the care and treatment of BL and other childhood cancers

PROGRESS

- Steering Committee comprised of representatives from Bugando Medical Center, St Mary's Hospital Lacor, INCTR's Cancer Registry Program, INCTR's Pathology and Pathology Education Programs, and INCTR's Clinical Studies program was held in February, 2014 in Tanzania to discuss the formation of the network and to prepare for implementation
- Networks of institutions that can work together with Bugando Medical Center have been identified
- Data is being analyzed from the earlier study to further identify a very high risk group of BL patients who could benefit from more up-front intensive therapy
- A pediatrician and nurse manager have been on the ground in Uganda to provide training to the staff and to develop training tools for this center and they have been assisting in identifying ways to improve data management/data quality and patient follow up
- Plans have been made for introducing ways to further improve diagnostic capabilities (e.g. through the introduction of immunophenotyping) in two hospitals
- Initial visits to both centers in East Africa have led to a strategy for improving existing cancer registries

FUTURE PLANS

- Formally establish the networks within each partner country in Africa
- Develop and design a new treatment protocol for very high risk patients
- Train cancer registrars in cancer registry
- Train pathologists and technicians at participating African centers in immunophenotyping and undertake independent central pathology review
- Provide training and consultation in diagnosis via iPath until such time as centers are certified in immunophenotyping
- Develop programs through to ensure local sustainability (e.g., local NGOs)

SPONSORS

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