



Mid Year Progress Report
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Through CURE Childhood Cancer, I have focused my research years on two different aspects of oncology research. The first is looking at survivors of childhood cancer and determining their risks of developing basal cell carcinoma, a common skin cancer. Previous studies have shown that patients who received radiation therapy as a component of their initial treatment are at a higher risk of developing basal cell carcinoma, and that they develop skin cancer at a younger age than the rest of the population. Using this background, I am analyzing the actual doses of radiation therapy that put patients at higher risk. Furthermore, I am looking at whether skin color, artificial tanning, and increased time in the sun affect this risk. The hope of the analysis will be to provide adult physicians with guidelines for screening for skin cancer in this unique population. In addition, I hope to be able to provide education to patients, who are at risk for skin cancer based on radiation therapy, to not participate in any behaviors that would further increase this risk. At the culmination of this analysis, I will have completed my Masters in Science of Clinical Research. This will provide me the tools to better run clinical trials in the future, and will allow me to become a better and more effective researcher in pediatric oncology.

The other focus of my research has been new chemotherapy agents for leukemia patients. I am combining known chemotherapy agents with newer agents that will hopefully improve the rate of cell death in patients with relapsed leukemia. One of these trials should be open to multiply relapsed leukemia patients in the next few months. Associated with this clinical trial, I am looking at a new method of studying leukemia cells. The goal is to create a method that will not only explain the differences between leukemia cells, but also will be able to provide better information on treatment of individual patients' leukemia. Finally, I, with others, am in the early stages of developing a less toxic and hopefully equally efficacious asparaginase to be used in patients with leukemia. This was the subject of a poster presentation at our annual meeting, American Society of Hematology, in December 2007.

With all of the support both from CURE and my fellowship, I will continue to pursue clinical research in the future. I plan to stay here at Children's Healthcare of Atlanta. Next year, I will join the Leukemia/Lymphoma Team in addition to the Innovative Therapies team, and hope to continue to develop new chemotherapy regimens for patients with leukemia.

I continue to love my patient interactions, both in clinic and in the hospital. Seeing the patients from diagnosis to the end of their treatment continues to provide me with the enthusiasm to pursue my research interests. Without the patients to try new drugs, participate in clinical studies, and provide the ideas for future projects, I would not be as interested in research. I believe it is truly being able to walk across the street to the hospital and think how something I am working on now might improve a future patient's life that makes all the difference in my career. It is for this reason that my future career plans will always include seeing patients and spending a percentage of my time caring for current and future patients.