Cardio-oncology: Cure the cancer and protect the heart

Major therapeutic strides have been accomplished in oncology. Perhaps one of the best has been in breast cancer. Approximately, 3 million women are breast cancer survivors. However, there is a dark side to that statistic. Instead of women dying of breast cancer, data suggest that these women are dying of cardiovascular disease. Depending on the type of therapy, women can be up to 7 times more likely to develop cardiomyopathy compared to women who don't receive cardiotoxic therapy. The epidemiology data and clinical research are changing the paradigm of cardiotoxicity in cancer therapy. Recently, the American Society of Clinical Oncology published recommendations on the prevention and management of cancer patients undergoing cardiotoxic therapies. Risk factor assessment, imaging and biomarkers have emerged as new strategies to assess and manage these patients. Perhaps, the most intriguing data that has been published in this arena is the use of global longitudinal strain (GLS). Measurement of GLS has demonstrated the ability to predict negative cardiac outcomes. It has the ability to detect subclinical damage to the heart. This concept is radically different than our historic methods of detecting cardiotoxicity. Historically, the preferred and most accepted imaging has been the multigated acquisition or MUGA. However, this time of imaging has limitations, in particular, the ability to detect subclinical cardiotoxicity. It can only detect cardiotoxicity that has already resulted in decline in ejection fraction. This presentation will discuss the epidemiology of cardiotoxicity in cancer patients and discuss the emerging strategies to detect, prevent and manage cardiotoxicity.

Biography

Sandra Cuellar is a Clinical Assistant Professor in the Department of Pharmacy Practice at the University of Illinois at Chicago (UIC) College of Pharmacy. She has been active in the field of hematology/oncology for 13 years. She is the Coordinator and Clinical Assistant Professor for Oncology Therapeutics. She has completed a Pharmacy Practice Residency at University of Kentucky Chandler Medical Center. Following her residency, she has completed a Specialty Oncology Residency at MD Anderson Cancer Center in Houston, Texas. She currently is the Clinical Pharmacist in the Out-Patient Cancer Center and is also the Director of the Oncology Specialty Residency program at UIC. She is an Editor for Journal of Hematology Oncology Pharmacy and is involved in research, consulting and publications in the field of hematology/oncology. Currently, she is a Member of the ASHP educational steering committee and serves as an ASHP Oncology Surveyor.

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