What is cardio-oncology?

Cardio-oncology is the evolving discipline focused on the intersection of cardiovascular disease (CVD) and cancer. Cardiovascular diseases increase the risk of complications of cancer treatment, and cancer treatment itself can cause cardiovascular diseases. On average, 20% of patients receiving certain classes of anticancer therapies may experience cardiac adverse effects that manifest as either an acute toxic effect or potentially a late complication.

On the flip side, pre-existing cardiac conditions or risk factors may limit available therapeutic options for cancer treatment. Some of the same factors cause both cardiovascular disease and cancer. For the first time, clinicians and researchers are starting to link these previously unrelated diseases.
Why is cardio-oncology important?

The National Cancer Institute reports 41% of cancer survivors live 10 years or more, and 15% live 20 years or more. After secondary malignancies, cardiovascular issues are the leading cause of late morbidity and death among cancer survivors. Also, to help more patients become cancer survivors, understanding how cardiovascular disease contributes to response to cancer treatment is important. There is an urgent need for oncologists, cardiologists, and basic and population science researchers to be more proactive in developing strategies to work together to understand how best to treat the whole patient, one who can be affected by both cardiovascular disease and cancer.

What is happening at Duke?

A cardio-oncology working group formed in late 2014 at Duke University as a joint collaboration of cardiologists and oncologists who share a similar interest in cardio-oncology. The group has worked diligently on identifying priorities and tasks in diverse areas of need. The goal of the group is to create a foundation that will allow for the development of a full cardio-oncology program at Duke. Faculty involved the in cardio-oncology working group are Drs. Chiara Melloni, Michel Khouri, and Pamela Douglas (Department of Cardiology); Drs. James Abbruzzese, Gretchen Kimmick, Michael Harrison, Steven Patierno, and Kathryn Pollak (Duke Cancer Institute); and Dr. Michaela Dinan (health service research, Duke Clinical Research Institute, Duke Cancer Institute).

The cardio-oncology working group will host its first Duke Cardio-Oncology Symposium on Saturday, March 5th, 2016.
Meet us:

**Gretchen Kimmick, MD, MS,** is a breast medical oncologist with expertise in cancer in older persons and in those with multiple comorbidities, including cardiovascular disease. Recognizing that she was often diagnosing heart disease in her older breast cancer patients brought her to the field of cardio-oncology. She has championed the field both nationally, including leading an American Society of Clinical Oncology Educational Symposium on the topic in 2012, and locally, supporting collaborations in the field and as a member of the cardio-oncology working group at Duke.

**Michel Khouri, MD,** is a cardiologist with expertise in advanced echocardiography as well as advanced heart failure and transplantation. His primary interest is the emerging field of cardio-oncology, where he hopes to advance efforts to improve the identification and prognostication of cancer patients at higher risk for developing cardiovascular disease and heart failure during cancer therapy and into survivorship. He has a growing cardio-oncology clinic at Duke where he sees at-risk cancer patients.

He has also published in peer-reviewed journals and presented at national meetings on the utility of novel echocardiographic techniques (3-dimensional and myocardial deformation [strain] echocardiography), cardiopulmonary exercise testing, and post-exercise echocardiography to identify subclinical cardiovascular disease in cancer patients.
Recent publications


Upcoming events

First Global Cardio-Oncology Summit
Thursday–Friday, October 15–16, 2015
Nashville, TN
http://cardiaconology.ca/current-conference/

Boot Camp in Onco-Cardiology
Saturday, November 14, 2015
8 am to 5 pm
MD Anderson Cancer Center,
University of Texas, Houston, TX

First Duke Cardio-Oncology Symposium
Saturday, March 5, 2016
8 am to 5 pm
Durham, NC

Useful links
icosna.org    cardio-onc.org

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