

# The Role of Nursing in Cardio-Oncology

Natalee Roper, BSN, RN, CHPN  
Cardio-Oncology Clinical Coordinator

# Disclosures

- No COIs to disclose



# Background

**Cardio-Oncology** is the collaborative approach by the cardiologist and oncologist in the management and prevention of cardiovascular complications in oncology patients and survivors.



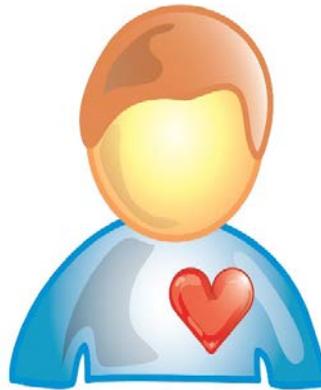
# Interprofessional Team

Registered Nurse with a strong Cardiac background and Oncology experience

Nurse Coordinator

EKGs, patient scheduling, obtaining records, clinic flow

Medical Office Assistant



Program Director

Board certified cardiologist with specialized training in cardio-oncology

Assistant Director

Board certified oncologist with an interest in cardiotoxicities of cancer therapy, education, program development and research

Sonographers

Diagnostic testing, transthoracic echocardiograms and transesophageal echocardiograms



# Role of the RN in Cardio-Oncology

Collaboration with the interprofessional team

Care coordination across the continuum

Patient education and communication

# Case Study

- LM, is a 52 year old female, who was recently diagnosed with Left-sided invasive ductal ca (triple hormone positive).
- She lives in Fort Lauderdale, FL, and will need an appointment for cardiac risk assessment prior to her high-risk chemotherapy treatment.
- Her treatment plan includes: neoadjuvant Docetaxel, Carboplatin, Herceptin and Pejeta (TCHP). She will receive therapy every 3 weeks for a total of 6 cycles prior to surgery, then radiation.



# Patient Education

- Cancer Medications
  - TKIs
  - Targeted Therapies
  - Checkpoint inhibitors
  - MOABs
- Cardiac Medications
  - Anticoagulants
  - Beta-blockers, ACE inhibitors, diuretics
- Diagnostic Testing
- Prevention and Lifestyle

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## Nuclear Medicine Stress Test Instructions

Your doctor has ordered a stress test to identify people with coronary artery disease. The "tracer" dye will be injected into your arm and will be flowing through the coronary arteries.

Appointment Date as follows: \_\_\_\_\_

Appointment location: \_\_\_\_\_ USF Health Building 1000 Florida 33612. 813-916-8000

\_\_\_\_\_ Other

### Instructions

Please follow these instructions:

- Wear comfortable clothing.
- Wear tennis shoes.
- You may wear your glasses.
- Nothing to eat or drink for 4 hours before the test.
- You may have a light snack of decaffeinated coffee or cocoa.
- **NO** tobacco or alcohol for 24 hours before the test.
- **NO** lotions or perfumes on the day of the test.
- The test takes about 30 minutes to complete.

### Test Results

- The results of the test will be available to you within 24 hours.
- The technician will discuss the results with you.

### Questions

If you have any further questions, please call the Nuclear Medicine department at 813-916-8000.

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## Home Cardiac Monitoring

Your doctor has ordered a home cardiac monitoring device for you. This is a simple device for use at home that will monitor your heart rate and rhythm. Symptoms of abnormal heart rate or rhythm, such as palpitations or fainting, should be reported to your doctor before serious problems develop.

The necessary equipment will be provided to you by a representative from the company providing the device. The company will provide you with instructions on how to use the device.

Some important reminders:

- Wear your device at all times.
- Keep the device dry.
- Keep the device away from heat and cold.
- Record any symptoms you experience.
- Complete the test as instructed.
- Check your device after bathing.
- Batteries in the device last for 2 weeks.
- Watch your pulse. A normal pulse number is 60-100 beats per minute.

### Questions

- If you have any questions, please call the Nuclear Medicine department at 813-916-8000.
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Produced by the Patient Education Department  
H. Lee Moffitt Cancer Center  
H. Lee Moffitt Cancer Center

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## Diet Guidelines for a Healthy Heart before, during, & after cancer treatment

Some types of cancer treatments that involve chemotherapy, radiation, and targeted therapies can weaken a patient's heart and blood vessels making it harder for the heart to pump blood through the body. Some of these effects on the heart will show up immediately, while others can occur years after treatment is completed and the cancer is gone.

Your healthcare team will take steps to reduce these effects as much as possible by monitoring your heart function regularly during and after cancer treatment. If you have a heart condition, it is important to work with your oncologist and cardiologist to protect your heart as well as treat your cancer.

Along with medical treatment, a patient's best weapon for fighting both heart disease and cancer is a diet high in cancer-fighting foods and low in fat and sodium (salt). Regardless of whether cancer treatment has affected your heart or you have some type of heart disease already, adopting a healthy diet and lifestyle can improve both heart function and quality of life before, during, and after cancer treatment.

### Diet Recommendations for a Healthy Heart

- Aim for at least five (5) servings of vegetables and fruits a day without added salt, sugars, or sauces. Replace high-calorie foods with fruits and vegetables.
- Choose fiber-rich whole grains. Try to consume at least 25 grams of fiber each day. Examples include whole wheat, oats/oatmeal, rye, barley, corn, brown or wild rice, buckwheat, bulgur, millet, quinoa, and sorghum. Look for breads with (greater than or equal to)  $\geq 3$  grams of fiber and (less than or equal to)  $\leq 80$  milligrams of sodium per slice and the word "whole grain" listed as the first ingredient.
- Choose fats wisely. Eat very little saturated fat and avoid Trans fats altogether. Saturated fats are found in foods with fats from animals, as well as coconut and palm kernel oils. If you need to lower your blood cholesterol, reduce saturated fat to no more than 5 to 6 percent of total calories. For someone eating 2,000 calories a day, that is about 13 grams of saturated fat. Trans fats can raise your bad (LDL) cholesterol levels and lower your good (HDL) cholesterol levels. To avoid Trans fats, stay away from foods made with hydrogenated oil, including many packaged and fried foods. Replace those fats with heart-healthy, polyunsaturated and monounsaturated vegetable oils. Examples include olive oil, canola oil, nuts, and avocados.
- Choose lean meats low in saturated fat or substitute meats with vegetable protein foods (beans, lentils, soy, nuts and seeds). Try eating more plant-based or vegetarian meals. If you choose to eat meats, prepare them grilled, baked, roasted, steamed, poached, or broiled.
- Eat a variety of fish at least twice a week, especially fatty types that are high in omega-3 fatty acids (salmon, mackerel, sardines, trout, herring, and tuna). Omega-3 fatty acids decrease the risk of arrhythmias (abnormal heartbeats), lower triglyceride levels, slow the growth rate of plaque in the arteries, and lower blood pressure. To best preserve the omega-3 fatty acids, bake, broil, steam, or poach fish instead of frying.



# Patient Education and Teach-Back

## Patient Instructed to Call for the Following Symptoms:

- Palpitations
- Fluttering in the chest
- Skipped beats
- Chest pain
- Shortness of breath on exertion
- Intermittent shortness of breath

## Telephone Triage and Follow-Up

- Symptom management and appointment timing for patients experiencing cardiac issues
- Promote adherence through adequate explanation about rationale for medications
- Answer questions and provide reassurance to patients and families



People don't care  
how much you *know*  
until they know  
how much you *care*

- T. Roosevelt



# References

1. Bovelli D, Plataniotis G, Roila F, Group EGW. Cardiotoxicity of chemotherapeutic agents and radiotherapy-related heart disease: ESMO Clinical Practice Guidelines. *Ann Oncology* 2010; 21:v 277-82.
2. Fradley, Michael et al. Developing a comprehensive cardio-oncology program at a cancer institute: the Moffitt Cancer Center experience, 2017. *Oncology Reviews* 2017; 11:340
3. Von Hoff, Daniel et al. Risk factors for doxorubicin-induced congestive heart failure. *Annals of Internal Medicine* 1979; 91 (5) 710-7.
4. Siegel RL, Miller KD, Jemal A. Cancer Statistics, 2015. *CA Cancer J Clin* 2015; 65:5-29