A Lion's Heart: A Newly Diagnosed Case of Radiation-Induced Heart Disease (Myocardial Ischemia) in a Multigravid previously treated for Hodgkin's Lymphoma: An Interesting Case

Kia Angela B. Gargantiel, MD

Dr. Pablo O. Torre Memorial Hospital, Negros Occidental, Philippines

Abstract

Radiation therapy plays a pivotal role in the treatment of various thoracic malignancies. Radiation induced heart disease (RIHD) is one long term toxicity which can offset the improvement in cancer specific mortality. Survivors of Hodgkin Disease are at a greater risk of RIHD because they have a relatively longer cancer specific survival. This is a case of M.M., a 26 year old G2P2(2002) who underwent chemotherapy and radiotherapy at 19 years of age for Hodgkins Lymphoma. Seven years after, while on her second pregnancy, she was diagnosed to have Radiation Induced Acute Coronary Syndrome at 8 weeks AOG by EUTZ. She was exposed to high doses of antiplatelet and anticoagulant medications, and was subjected to a Coronary Angiogram revealing a 2-vessel disease thus a Percutaneous Coronary Intervention of the Left Main and Proximal Left Anterior Descending Artery was done. She was exposed to the teratogenic effects of xrays and other medications during the first trimester of her pregnancy. She was able to deliver at 38 1/7 weeks AOG by EUTZ via Low Transverse Cesarean Section II to a live male neonate, BW 7 lbs 6 oz, AS $9^{1}9^{5}$. She was able to bring her pregnancy to term without any compromise despite the exposure to treatment that could have otherwise compromised her pregnancy.

Image

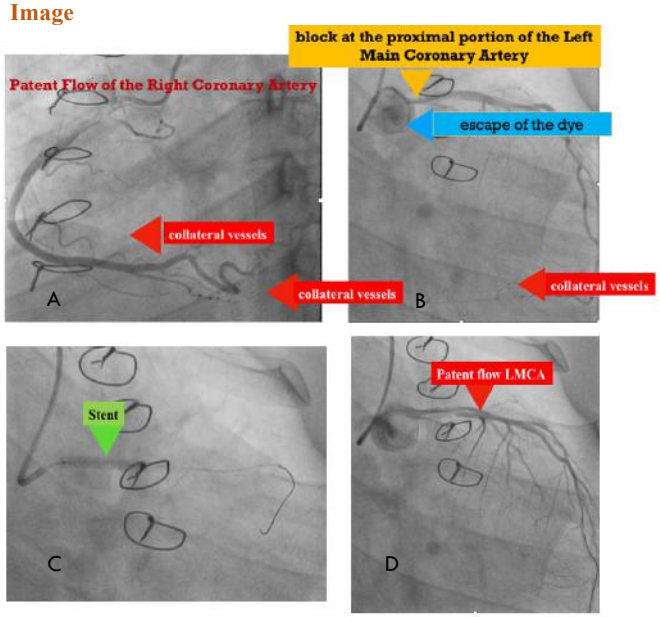


Figure 1. A. Coronary Angiogram of patient M.M. during pregnancy showing patent flow of dye through the Right Coronary Artery and collateral vessel formation (red arrows) **B.** Accumulation of dye at the proximal portion of the Left Anterior Descending Artery (blue arrow) signifying a block over the area (yellow arrow), with collateral vessel formation (red arrow) **C.** Percutaneous Coronary Intervention Stent Insertion on the Left Main Descending Artery (green arrow) **D.** Patent flow of dye through the Left Main Descending Artery after successful PCI

Recent Publications

1. Jaworski C, et al. 2013. *Cardiac Complications of Thoracic Irradiation*. Journal of the American College of Cardiology 61 (23): 2319-2328.

2. Jaiswal A, Rashid M, Balek M, Park C. 2013. *Acute Myocardial Infarction During Pregnancy: A Clinical Checkmate*. Indian Heart Journal 65: 464-468.

3. Wang E. 2012. *Pregnancy in Cancer Patients and Survivors*. Oncofertility Medical Practice: 129 Clinical Issues and Implementation.

4. Yusuf, S, et al. 2011. Radiation Induced Heart Disease: A Clinical Update. SAGE-Hindawi Access to Research Cardiology Research and Practice Volume 2011, Article ID 317659, 9 pages

5. Poh C, Lee C. 2010. *Acute Myocardial Infarction in Pregnant Women*. Ann Acad Med Singapore 39: 247-53.



Biography

Dr. Kia Angela B. Gargantiel is a 26 year old newly licensed physician based in the Philippines. She is currently on her first year of residency training with the Department of Obstetrics and Gynecology at Dr. Pablo O. Torre Memorial Hospital, a private hospital in Bacolod City, Negros Occidental, Philippines. Her interest in making researches had its roots while she was taking her undergraduate course, BS Biology where she was able to publish experimental researches and present these at conferences nationwide.

Email:
kiabgargantiel@gmail.com