

The Emerging Scenario of the Onco-Cardiovascular Patients

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ABSTRACT

Cardiotoxicity prevention remains an important challenge in the emerging scenario of the onco-cardiovascular patients. New targeted anticancer therapies haven't proven to be free from cardiovascular side effects while old anticancer therapies provide us with delayed serious consequences in long term cancer survivors. There is a need for large studies to clear apparently conflicting observations and to expand the evidence base in cardio-oncology promoting new strategies for patients' safety and to encourage the patients in their heavy cancer journey avoiding communication breakdowns.

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Key words: Cancer chemotherapy; Cardio-oncology; Cardiotoxicity; Onco-cardiovascular patients.

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EDITORIAL

Despite an improvement of prognosis in cancer patients,

cardiotoxicity is a well known consequence of both old and new cancer chemotherapies^[1-11]. The progress in the cancer knowledge and treatment has led to a new frontier: the cardio-oncology^[13-15] and to the emerging scenario of the onco-cardiovascular patients. New targeted anticancer therapies haven't proven to be free from cardiovascular side effects^[2,4,6,9-19] while old anticancer therapies provide us with delayed serious consequences in long term cancer survivors^[1,3,6,7,10-11]. This question raises the question of the surveillance and management of long-term cancer survivors also relating to their late increasingly cardiovascular outcomes^[1,3,7,10-11,18-19] and it increases the emerging scenario of the onco cardiovascular patients with a severe, disabling, or life threatening condition^[1-2,3,20]. Cardiotoxicity prevention remains an important challenge and cardioprotective strategies are available^[20] but appropriateness of cardiovascular care is yet suboptimal^[20-24] in clinical practice especially in elderly adult cancer survivors^[21]. Information on effectiveness of physical activity, diet, weight loss, decreased alcohol intake, information on follow-up and psychological assessment, management and long-term supportive care strategy could be addressed in promoting better cancer survivors overall health^[22-24] but communication breakdowns in cancer care are common and representing a patient-centered care failure^[1-2,25]. It is crucial that lesson learned from each patient informs clinical decision making for the next patient care^[26] as well as there is an absolute need to explore molecular and genomic predicative factors of cardiotoxicity and to highlight the relation, beyond coronary toxicity, between cardiac radiation dose distribution and other major clinical end points^[18]. There is a need for large studies to clear apparently conflicting observations^[15-17] and to expand the evidence base in cardio-oncology promoting new strategies for patients' safety and to encourage the patients in their heavy cancer journey^[1,5,8,12-17].

CONFLICT OF INTERESTS

There are no conflicts of interest with regard to the present study.

REFERENCES

- 1 Patanè S. Cardiotoxicity: Cisplatin and long term cancer survivors. *Int J Cardiol* 2014 Jul 15; **175(1)**: 201-202. doi: 10.1016/j.ijcard.2014.04.238. Epub 2014 Apr 29
- 2 Patanè S HERG-Targeted therapy in both cancer and cardiovascular system with cardiovascular drugs. *Int J Cardiol* 2014 Aug 2
- 3 Patanè S. Cardiotoxicity: Anthracyclines and long term cancer survivors. *Int J Cardiol* 2014 Aug 4. pii: S0167-5273(14)01359-X. doi: 10.1016/j.ijcard.2014.07.149. [Epub ahead of print]
- 4 Patanè S. ERBB1/ EGFR and ERBB2 (HER2/neu) - Targeted therapies in cancer and cardiovascular system with cardiovascular drugs. *Int J Cardiol* 2014 Aug 2. pii: S0167-5273(14)01371-0. doi: 10.1016/j.ijcard.2014.07.161. [Epub ahead of print]
- 5 Patanè S. Cancer Multidrug Resistance -Targeted therapy in both cancer and cardiovascular system with cardiovascular drugs. *Int J Cardiol* 2014 Aug 2. pii: S0167-5273(14)01368-0. doi: 10.1016/j.ijcard.2014.07.158. [Epub ahead of print]
- 6 Mazevet M, Moulin M, Llach-Martinez A, Chargari C, Deutsch E, Gomez AM, Morel E. Complications of chemotherapy, a basic science update. *Presse Med* 2013; **42(9 Pt 2)**: e352-61
- 7 Nusrat Bano, Rahila Najam, Faaiza Qazi Adverse Cardiac Manifestations of Cisplatin - A Review. *Int J Pharm Sci Rev Res* 18(1), Jan – Feb 2013; n° 12, 80-85
- 8 Patanè S. A dark side of the cardio-oncology: the bacterial endocarditis prophylaxis. *Int J Cardiol* 2012 Jun 14; **157(3)**: 448-449. doi: 10.1016/j.ijcard.2012.04.023. Epub 2012 Apr 30
- 9 Guglin M, Aljayeh M, Saiyad S, Ali R, Curtis AB. Introducing a new entity: chemotherapy-induced arrhythmia. *Europace* 2009 Dec; **11(12)**: 1579-86.
- 10 Yeh ET, Bickford CL. Cardiovascular complications of cancer therapy: incidence, pathogenesis, diagnosis and management. *J Am Coll Cardiol* 2009 Jun 16; **53(24)**: 2231-2247
- 11 Suter TM, Ewer MS. Cancer drugs and the heart: importance and management. *Eur Heart J*. 2013 Apr; **34(15)**: 1102-11. Review
- 12 Patanè S. Is there a need for bacterial endocarditis prophylaxis in patients undergoing urological procedures? *J Cardiovasc Transl Res* 2014 Apr; **7(3)**: 369-71. doi: 10.1007/s12265-014-9550-z. Epub 2014 Feb 25
- 13 Patanè S. Is there a need for bacterial endocarditis prophylaxis in patients undergoing Gastrointestinal Endoscopy? *J Cardiovasc Transl Res* 2014 Apr; **7(3)**: 372-374. doi: 10.1007/s12265-014-9553-9. Epub 2014 Feb 25
- 14 Patanè S. A challenge in cardiology: the oncosurgery. *Int J Cardiol* 2014 Jun 15; **174(2)**: 411-2. doi: 10.1016/j.ijcard.2014.04.046. Epub 2014 Apr 13
- 15 Patanè S. Heart failure and breast cancer: emerging controversies regarding some cardioprotective strategies. *J Card Fail* 2014 Jun; **20(6)**: 456-457. doi: 10.1016/j.cardfail.2014.04.014. Epub 2014 Apr 18
- 16 Patanè S. Breast cancer treatment cardioprotective strategies: the King is naked. *J Am Heart Assoc* 2014 Published July 22, 2014 <http://www.jaha.ahajournals.org/content/3/2/e000665/reply>
- 17 Patanè S. Insights into Cardio-oncology: Adrenergic receptor signaling and pathways in breast cancer. *Curr Med Res Opin* 2014 Jun 26: 1-2. [Epub ahead of print] <http://informahealthcare.com/doi/full/10.1185/03007995.2014.932636>
- 18 Chargari C, Guy JB, Falk AT, Schouver ED, Trone JC, Moncharmont C, Védrine L, Magné N. Cardiotoxicity research in breast cancer patients: past and future. *Am J Cardiol* 2014 Apr 15; **113(8)**: 1447-1448. doi: 10.1016/j.amjcard.2014.01.421. Epub 2014 Feb 6
- 19 Kreatsoulas C, Anand SS, Subramanian SV. An emerging double burden of disease: the prevalence of individuals with cardiovascular disease and cancer. *J Intern Med* 2013 Nov 19.
- 20 Kalam K, Marwick TH. Role of cardioprotective therapy for prevention of cardiotoxicity with chemotherapy: a systematic review and meta-analysis. *Eur J Cancer* 2013; **49(13)**: 2900-2909
- 21 Cheung WY, Levin R, Setoguchi S. Appropriateness of cardiovascular care in elderly adult cancer survivors. *Med Oncol* 2013; **30(2)**: 561
- 22 Luoma ML, Hakamies-Blomqvist L, Blomqvist C, Nikander R, Gustavsson-Lilius M, Saarto T. Experiences of breast cancer survivors participating in a tailored exercise intervention -a qualitative study. *Anticancer Res*. 2014; **34(3)**: 1193-1199.
- 23 Budden LM, Hayes BA, Buettner PG. Women's decision satisfaction and psychological distress following early breast cancer treatment: a treatment decision support role for nurses. *Int J Nurs Pract* 2014; **20(1)**: 8-16
- 24 McCarthy AL, Yates P, Shaban RZ. Cross-sectional survey of the health behaviour of southeast queensland women with cancer-treatment induced menopause: implications for cancer and primary care nurses. *Collegian* 2013; **20(4)**: 223-231
- 25 Prouty CD, Mazor KM, Greene SM, et al. Providers' Perceptions of Communication Breakdowns in Cancer Care. *J Gen Intern Med* 2014 Aug; **29(8)**: 1122-30. doi: 10.1007/s11606-014-2769-1. Epub 2014 Mar 6
- 26 Abernethy A, Abrahams E, Barker A, Buetow K, Burkholder R, Dalton WS, Foti M, Frueh F, Gaynor RB, Kean M, Khan Z, Lessor T, Lichtenfeld JL, Mendelsohn J, Van't Veer L. Turning the Tide Against Cancer Through Sustained Medical Innovation: The Pathway to Progress. *Clin Cancer Res* 2014 Feb 12

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