Sex and gender issues in cardiotoxicity: Are we ready for gynecardiooncology?

We found your paper very interesting, stressing the importance of peculiar imaging modalities in female patients with ischemic heart disease (IHD), and the powerful diagnostic yield of coronary flow reserve (CFR) after cardiotoxic treatment.¹ Actually in cancer patients the “sex and gender issue” has not been fully addressed, yet. Besides the sex-related unusual clinical manifestation and the frequent occurrence of coronary microvascular dysfunction (CMD), in this population we have to be aware of the role of “female specific” risk factors. Obstetric complications such as PE and pregnancy-related hypertension are now recognized as risk factors for cardiovascular diseases later in life² leaving a permanent signature on the endothelium. In these patients, CFR reduction could be a marker of pre-clinical endothelium dysfunction. In our institution, in female left breast cancer patients with a history of PE and an indication for RT we performed a stress/rest myocardial perfusion imaging (MPI) with evaluation of CFR before and after RT.³ We found MPI defects and reduction of CFR *at baseline* that increased *after RT*. We have few preliminary data and a short follow-up, but the “antiangiogenic” status of the endothelium of these patients will likely interact with “vasculotoxic” treatments such as RT, fluoropyrimidines, antiangiogenic drugs with enhanced toxicity. These vulnerabilities have to be matched to the sex-related manifestations of IHD in women, so the CFR may fill the sex gaps in imaging and help us in recognizing early markers of CMD. A greater awareness of sex and gender issue is needed in cardiooncology, and we should get ready to start the “gynecardiooncology” era.

SOME QUESTIONS TO THE AUTHORS

- (1) Do they agree that cardiotoxicity needs to be addressed in a “sex and gender oriented” way to improve survival?

- (2) What do they think of a gynecardiooncologic approach to female cancer patients?

Disclosures *The authors declare that they have no conflict of interest.*

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