

Healthcare utilization and hospital variation of cardiac surveillance during breast cancer treatment

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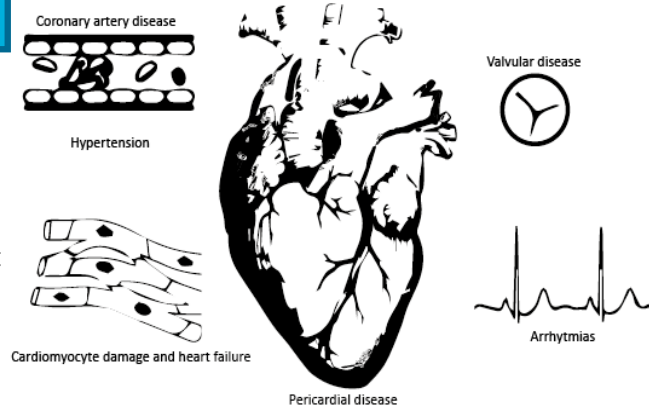
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Introduction

- Anthracycline and trastuzumab treatments are the cornerstone of current breast cancer regimens, but their cardiotoxic effects are well established. (Fig. 1)
- Cardiac surveillance with both biomarkers and serial monitoring of LVEF are recommended.
- The extent to which this is implemented in current healthcare for breast cancer patients is largely unknown

Figure 1. Cardiotoxic effects of cancer treatment



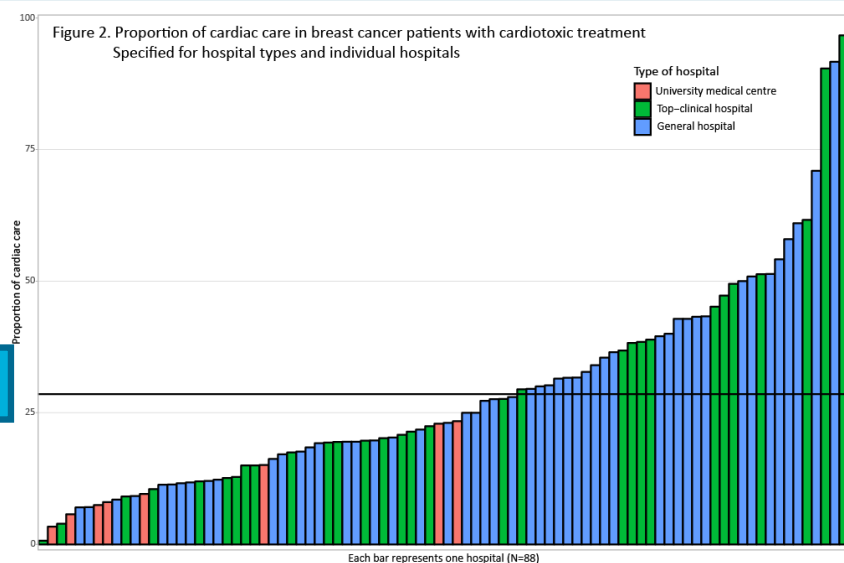
Aim: To describe current cardiac surveillance for women with BC during and after cancer treatment, and examine the healthcare variation between hospitals.

Methods

- Observational study in newly diagnosed BC patients receiving cardiotoxic treatment in 2013 (N=5157)
- Dutch hospital data from 2012 up to 2015, provided by Statistics Netherlands
- Healthcare utilization analysis for cardiac laboratory tests and diagnostic procedures, including cardiac imaging
- Assessment of variation in delivered cardiac care between hospitals

Results

- Cardiac surveillance mainly consisted of ECGs (52.0%) and MUGA scans (26.5%) prior to cancer treatment.
- Echocardiography was performed in 17.7%, and CMR only in 0.7%.
- Troponin and NT-proBNP measurements were performed in 5.1% and 5.8%.
- Large variation in delivered cardiac care between included hospitals was observed. (Fig. 2)



Conclusion

- Cardiac surveillance is rarely performed, and varies highly between hospitals
- Guidelines, and therefore standardized protocols are lacking

A comprehensive guideline, increased awareness and multi-disciplinary collaboration are needed for early detection of cardiac damage in BC patients, and therefore improvement of clinical outcomes.

No conflicts of interest

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