The Cardiotoxic effects of anti-cancer treatment

- A study of Trastuzumab's impact on the heart

Connie Blix Hansen
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Supervisors: Anne Dragøy Hafstad and Egil Støre Blix
The University of Tromsø (UiT)
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Introduction

• 3300 new cases of breast cancer each year. Median survival at 5 years = 90 %

• Herceptin decreases mortality with 33% and reduces risk of relapse with 50%.

• What’s the risk of developing heart failure ensuing Trastuzumab treatment for breast cancer?
Methods

- Case series
- Inclusion: breast cancer stage I-III, no age limits
- Exclusion: metastasis, HER2 negative status, no Trastuzumab treatment and diagnosis of heart failure prior to treatment
Results

Figure 3. Distribution expressing number of individuals displaying different ranges in left ventricular ejection fraction (LVEF) at scheduled heart assessment at baseline, 3, 6, 9 and 12 months after introduction of Trastuzumab. Patient population consisted of n=202 at baseline, n=201 at 3 months, n=197 at 6 months, n=184 at 9 months, and n=147 at 12 months. N= number of individuals.

Figure 4. Distribution expressing number of individuals displaying different ranges of decline in left ventricular ejection fraction (LVEF). Decline is found by comparing baseline LVEF (0 months) to the next scheduled evaluation of LVEF during Trastuzumab treatment. Patient population consisted of n=202 at baseline, n=201 at 3 months, n=197 at 6 months, n=184 at 9 months, and n=147 at 12 months. N= number of individuals.
Conclusion

- Higher incidence of heart failure when assessing real-life based data from Northern-Norway – compared to results in international randomized controlled trials