

Trastuzumab induced cardiotoxicity in Her2 positive metastatic oeso-gastric cancers

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INTRODUCTION

Trastuzumab is widely used in Her2 positive metastatic oesophageal and gastric cancers along with chemotherapy.

Cardiotoxicity of trastuzumab has been described precisely in Her2 positive breast cancers and occurs with asymptomatic lowering of LVEF (Left Ventricular Ejection Fraction) in up to 10-15% of cases depending on the study in breast cancers.

Oeso-gastric cancer patients are usually older and have more comorbidities than patients followed for breast cancer.

We wanted to evaluate the incidence of this cardiotoxicity in oeso-gastric cancer patients and its potential impact on treatment management.

METHODS

- monocentric retrospective study.
- Data from 23 patients followed for metastatic oeso-gastric cancers from October 2009 to September 2014.
- Patients received trastuzumab along with concomitant chemotherapy for treatment of Her2 positive metastatic oeso-gastric cancer as a first line chemotherapy.
- 100 % Her2 positive tumors

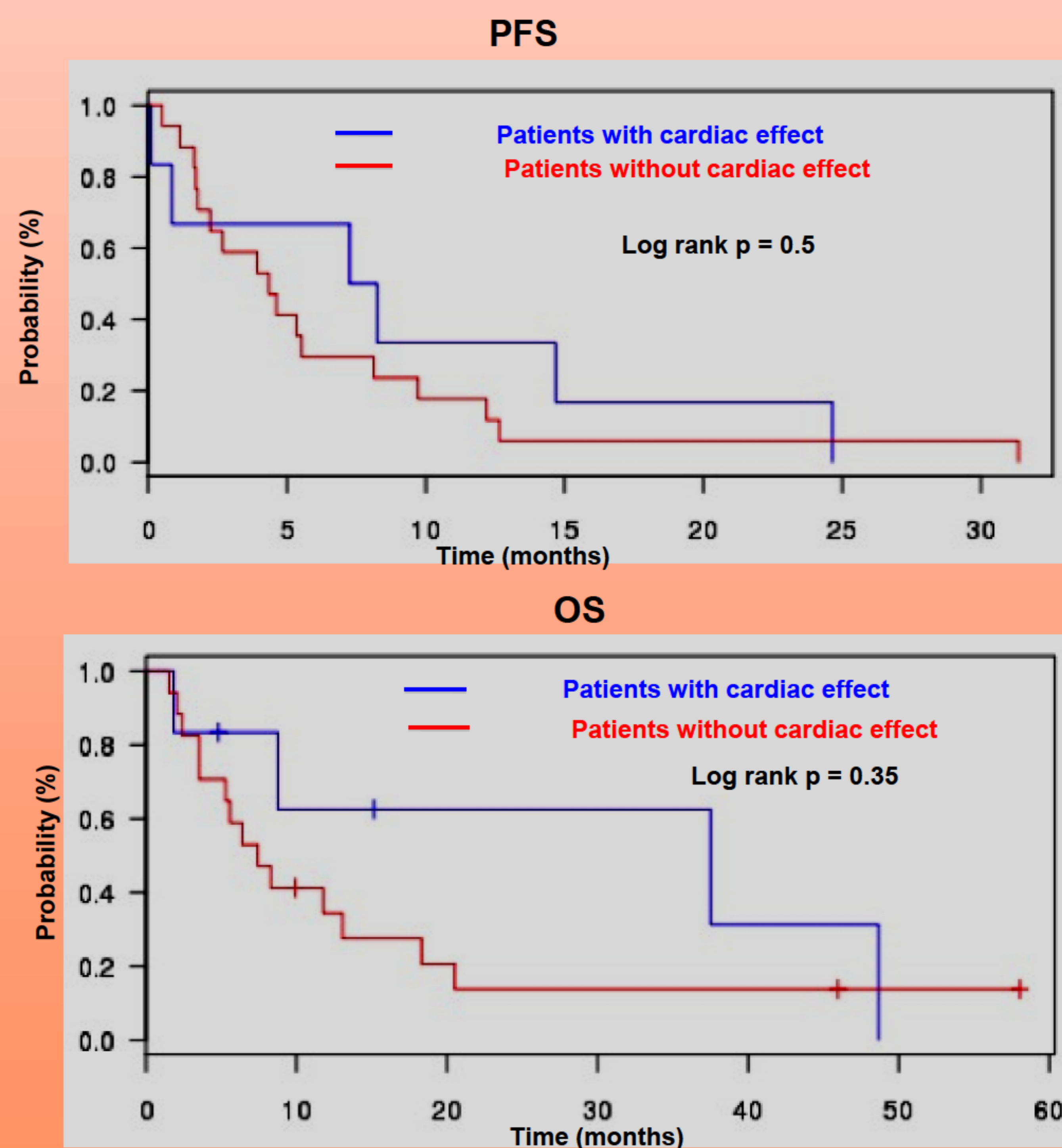
Objectives :

- to assess the incidence of cardiotoxicity in oeso-gastric Her2 metastatic cancer treated with trastuzumab.
- to evaluate its potential impact regarding overall survival, progression-free survival

RESULTS / PROGRESSION FREE SURVIVAL (PFS) / OVERALL SURVIVAL (OS)

- The asymptomatic cardiotoxicity rate, defined by a drop of more than 10% of LVEF between the enrolment echocardiogram and the third month treatment echocardiogram, was observed in 6 patients (26 %) out of 23.
- Symptomatic cardiotoxicity was observed in 2 patients (8,6%) with no associated death :
 - ➔ one cardiac failure
 - ➔ one myocardial infarction
- Cardiovascular comorbidities and cardiac irradiation did not appear as a predictive factor of cardiotoxicity (p=1).
- The cardiologic follow-up of these patients was regular, in comparison to the guidelines for the management of trastuzumab in breast cancer patients, in 43% of patients (n=10) with an evaluation of LVEF every three months.

	Patients without cardiac effect (n=17)	Patients with cardiac effect (n= 6)	p value
Median age in years (range)	62.7 [36.3 -74.7]	65.3 [53.1-76.7]	p = 0.60
Sex ratio Women / Men	4 / 13	1 / 5	NA
Chemotherapy in the adjuvant settings	29 %	50 %	p = 0.68
Mean number of trastuzumab injections (IC 95%)	8.53 [3.58-13.48]	11.33 [2.76-19.90]	p = 0.55
Number of patients receiving further treatments	8	2	p = 0.91
Median PFS months (IC95%)	4.36 [0.80-7.89]	7.77 [0.40-15.15]	p = 0.5
Median OS months (IC95%)	7.44 [0.80-23.24]	11.95 [3.39-27.30]	p = 0.35



CONCLUSION

This study is to our knowledge the first to focus specifically on the cardiotoxicity of trastuzumab in oeso-gastric metastatic Her2 positive cancer in the real world.

These patients seem to be at a higher asymptomatic cardiac risk than breast cancer patients.

As in breast cancer we observed asymptomatic LVEF occurred mostly in the three first months of treatment.

However cardiovascular comorbidities didn't appear as predictive factors of trastuzumab induced cardiotoxicity and should not impede patients from benefiting of this treatment.

