TRASTUZUMAB- INDUCED CARDIOTOXICITY IN WOMEN WITH BREAST CANCER: A RETROSPECTIVE STUDY IN AN ONCOLOGY CLINIC

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Introduction

Cardiotoxicity is one of the adverse reactions related to the treatment of breast cancer with the antibody Trastuzumab, resulting from the mechanism of action that enables the formation of reactive oxygen species, resulting in cardiac dysfunction, which may lead to the postponement and/or suspension of the treatment[1]. The aim of this study was to identify the patient profile, risk factors and cardiotoxicity in patients undergoing Trastuzumab therapy in a private cancer clinic.

Material and Methods

Observational and retrospective study, based on the analysis of medical records of patients with breast cancer undergoing therapy with Trastuzumab, from 2017 to 2020. Approval number CAAE: 38594120.9 .0000.5243.

Results and Discussion

The study included 58 women with a median age of 54 years (27-77 years). The main previous comorbidities were: hypertension (46%), previous heart disease (41%), obesity (24%), dyslipidemia (22%) and diabetes mellitus (21%). The most evident risk factors in the study were: exposure to radiotherapy (88%), exposure to anthracyclines (50%) and age > 60 years (29%). Regarding modifiable risk factors, alcoholism (55%) and smoking (26%) were the most prevalent. The symptoms suggestive of cardiotoxicity highlighted in the study were: fatigue (76%), weight loss (19%), hypertension (17%) and hypertensive peak (15%). Twelve patients (21%) had late adverse drug reaction (ADR), such as left ventricular dysfunction and reduced left ventricular ejection fraction (LVEF), requiring antibody suspension or interruption. In relation of these 12 patients, 67% of the extreme or high-risk assessment index had no cardiotoxicity risk assessment algorithm[2]. Hamirani[3], et al, report that most breast cancer patients undergoing trastuzumab that reduce LVEF risk factors such as: hypertension, diabetes, dyslipidemia, pre-existing heart disease, in addition to the association of anthracyclines with trastuzumab, similar data to evidence in this study. Furthermore, it was shown that the presence of pre-existing hypertension, as observed in our study and others[3] can be used as a useful clinical predictor of future LVEF decline (58% of patients who experienced a decline in LVEF were hypertensive).

Conclusion

Therefore, according to the results of the study, cardiotoxic adverse drug reactions (ADRs) can evolve into severe ADRs, thus, it is necessary to monitor patients and train the multidisciplinary team to detect and manage the signs and symptoms of early cardiotoxicity.

Bibliographic References

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