Pet godina rada Ambulante za kardiotoksičnost Kliničkog bolničkog centra Sestre milosrdnice

Five years of the Cardiotoxicity Clinic at University Hospital Centre "Sestre milosrdnice"

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Uvod: Kardiotoksičnost je sve češća nuspojava onkološkog liječenja. Od ranije je poznato da uslijed liječenja antraciklinima dolazi do sporoprogresivnog oštećenja sistoličke funkcije lijevog ventrikula (LV), a uslijed liječenja inhibitorima pirimidina (5-FU) dolazi do ishemije srčanog mišića uzrokovanog spazmom koronarnih arterija. U novije vrijeme otkriveno je da noviji biološki odnosno ciljani lijekovi također dovode do kardiotoksičnosti. Biološki lijekovi su posebno razvijena monoklonska protutijela ili inhibitori tirozin kinaze koji blokiraju bilo receptore HER-2, bilo VEGF aktivnost. Međutim, time se ometaju i ključni molekularni mehanizmi u kardiovaskularnom sustavu. Anti HER2 terapija najčešće dovodi do reverzibilne sistoličke disfunkcije LV-a, a blokadom VEGF receptora dolazi do razvoja arterijske hipertenzije i povećane sklonosti tromboembolijskim incidentima.[1-3]

Bolesnici i metode: U Ambulanti za kardiotoksičnost Klinike za bolesti srca i krvnih žila Kliničkog bolničkoga centra Sestre milosrdnice je u 5 godina postojanja praćeno više od 200 bolesnika s raznim malignim bolestima. Većina bolesnika je pregledana zbog poremećaja sistoličke funkcije LV-a, zatim zbog neregulirane hipertenzije, a na trećem su mjestu po učestalosti supraventrikulski i ventrikulski poremećaji ritma. Većini bolesnika se uspjelo nastaviti i završiti onkološko liječenje. Liječenje se nastavljalo ovisno o obliku i stadiju maligne bolesti, odnosno važno je radi li se o metastatskoj ili lokalnoj, odnosno lokalno proširenoj bolesti.

Zaključak: Ranim prepoznavanjem i liječenjem bolesnika kod kojih je došlo do razvoja kardiotoksičnosti postiže se poboljšanje kliničkih ishoda i kvalitete života. Tako je često moguće nastaviti specifično liječenja maligne bolesti. Pri tome je nužan multidisciplinarni pristup kardiologa i onkologa kao i redovito kardiološko praćenje.

Introduction: In the past 30 years, malignant disease mortality has been reduced, among other things, owing to advances in chemotherapeutic protocols. However, prolonged survival frequently is achieved at the expense of damage to other organs, including the cardiovascular (CV) system. Both conventional chemotherapy and targeted biological therapy increase the risk of heart injury, left ventricular (LV) dysfunction and symptomatic heart failure. In addition, hypertensive reaction, vasospastic and/or thrombotic myocardial ischemia, rhythm and conductivity disorders may also occur. Some of these adverse effects are irreversible and cause progressive CV disease, whereas others cause only transient dysfunction without long-term sequels. Tumor biological therapy with monoclonal antibodies or tyrosine kinase inhibitors (TKI) target human epidermal growth factor 2 (HER2) receptors, vascular endothelial growth factor (VEGF) and VEGF receptors. However, these actions also interfere with molecular mechanisms that are crucial for cardiovascular health. Anti HER2 therapy generally induces reversible systolic LV dysfunction, whereas VEGF receptor blockade leads to development of arterial hypertension and increased susceptibility to thromboembolic events.[1-3]

Patients and Methods: In Cardiotoxicity Clinics of University Hospital Centre "Sestre milosrdnice", in 5 years of existence, more than 200 patients with various malignancies were monitored. Most patients were screened due to systolic LV function, then due to unregulated hypertension, and due to supraventricular and ventricular rhythm disorders. Majority of patients were able to continue and end oncological treatment. The type of treatment was adapted to the stage of malignancy, whether it was metastatic or local or locally spread disease.

Conclusion: Oncologic patients receiving chemotherapy or targeted biological therapy associated with a high risk of cardiotoxicity require the multidisciplinary approach including cardiologists and oncologists, along with regular cardiologic follow up, for timely recognition and appropriate treatment of CV side effects. Such an approach results in a more favorable clinical outcome and patient quality of life, along with optimal continuation of specific oncologic treatment if possible.

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