

Drug–drug interaction in elderly patients with cancer

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Background

Elderly cancer patients have a high risk of exposure to potential drug–drug interactions (pDDIs), given the therapeutic complexity to which they are subjected. The study of pDDIs is very important to enable more effective treatments, with the least possible number of complications. The aim of this study was to identify and characterize pDDIs in elderly cancer patients treated at the Day Hospital of IPO-Porto.

Methods

Information about patients sociodemographic data and chronic medication were collected through an interview with application of a questionnaire to the elderly patient. Patient's clinical files were also consulted to complement information needed for the study. The ATC classification of drugs was performed and Micromedex[®] tool was used to identify and characterize pDDIs. The most prevalent pDDIs were analyzed and discussed.

Results

A total of 335 elderly patients with cancer were enrolled in the study. The prevalence of polymedication was 88.10% and excessive polymedication was 46.60%. A total of 1125 pDDIs were identified in 248 patients (74.03%) and 211 pDDIs involved at least one antineoplastic drug. The pDDIs that were detected more frequently were: Fluorouracil - Leucovorin Calcium ($N = 28$), Cyclophosphamide - Ondansetron ($N = 27$) and Metoclopramide - Tramadol ($N = 20$). A significant association was detected between the number of drugs consumed and the number of pDDIs.

Conclusions

Elderly patients with cancer have a high risk of drug interactions, given the polymedication they are exposed. It's crucial to implement measures to monitor their therapy in order to reduce the potential for drug interactions and improve the quality of patient's life.

Keywords: Polimedication, Drug-drug interaction, Oncology, Elderly cancer patient.