

P-824 - DRUG INTERACTION IN PSYCHO ONCOLOGY -ANTIDEPRESSANTS AND ANTINEOPLASICS

F.O.Miguel, E.Albuquerque

¹Psychiatry Service, Hospitals of the University of Coimbra, ²Psychiatry Unit, Portuguese Institute of Oncology of Coimbra, Coimbra, Portugal

Background and objectives: Although there is a growing impact of psychiatric disorders and depressive disorders in cancer patients, there is scarce literature on the idiosyncrasies of antidepressants (ADs) used in those conditions and their interactions with antineoplastic agents (ANs). Sharing the same biotransformation roots enhances the risk of drug interaction between ADs and ANs, which specific pharmacokinetic properties are determinant to their nature as inducer, inhibitor or substrate of cytochromes P450 (CYP450). In cancer patient, such drug interactions (DIs) may result in less efficacy of the drug and/or increase their side effects. Therefore, the choice of AD should be cautious (safe and effective) and well supported. The main purpose of this paper is to analyse the individual pharmacokinetic properties of the most used ADs and ANs, in order to summarize the risk of possible DIs between them, anticipating the consequences of their co-administration.

Methods: The authors reviewed books, articles and PubMed on line articles, published in the last 6 years.

Results: Most of ANs suffer transformation in CYP450 3A4 and that co-administration of ADs with inhibiting properties of this CYP isoform as fluoxetine, sertraline, paroxetine and fluvoxamine may result in loss of efficacy or higher toxicity and should be used cautiously.

Conclusion: Among the ADs, escitalopran, citalopram, venlafaxine, mirtazapine and milnacipran stood out regarding their weak CYP450 inhibitory potential and safety profile in those patients.