

FOOD AND DRUG INTERACTIONS IN ORAL CANCER THERAPY

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BACKGROUND

Determine the prevalence and seriousness of interactions with oral antineoplastic agents (OAA) is essential if we want to design efficient systems that could prevent them.

PURPOSE

To quantify and assess OAA-drug and OAA-food interactions in cancer patients.

MATERIALS AND METHODS



Observational, cohort study.

Conducted between June 2011 and May 2012 by the Outpatient Pharmacy Department of a teaching hospital.



340 patients receiving cancer treatment were interviewed by a pharmacist.

Each one was followed up for six months, through consecutive interviews.

Clinical records and dispensing data were recorded: age, gender, tumour type, OAA treatment (active pharmaceutical ingredient and drug regimen), concomitant food intake and concomitant medication.

OAA-drug and OAA-food interactions and their relevance were assessed through Carcelero et al. (2014) application available in GEDEFO website (Oncology Pharmacy Spanish Group).



Statistical data analysis was performed using STATA v.12 program.

RESULTS

973 interviews

104 (10.69%)
OAA-drug interactions

related to

47 (13.82%)
patients

mean age

68.66
(53.12-76.92)

44.68%

men

PRINCIPAL MEDICAL DIAGNOSIS

lung cancer (34.04%)

colorectal cancer (21.28%)

chronic myeloid leukemia (17.02%)

2 (1-3) mean interactions per patient

Clinical
relevance

Major interactions
22 (21.15%)

Potential interactions*
22 (21.15%)

*(requiring dose adjustment or close monitoring)

Food interactions

32 (3.28%)

IDENTIFIED DRUG INTERACTIONS

OAA	Drugs	Interactions (n,%)
capecitabine	acenocoumarol	32 (29.36)
erlotinib	omeprazole, ranitidine	22 (20.18)
imatinib	acenocoumarol, levothyroxine, simvastatin	18 (16.51)
gefitinib	omeprazole, ranitidine, esomeprazole	13 (11.93)
lapatinib	omeprazole, rabeprazole	9 (8.26)
temozolamide	valproic acid	8 (7.35)
dasatinib	omeprazole, lovastatin	3 (2.75)
pazopanib	calcium carbonate, pantoprazole	2 (1.83)
sorafenib	domperidone	2 (1.83)

CONCLUSIONS

- OAA-drug interactions occur in 13% of cancer patients. More than 20% of them are major interactions. Fewer OAA-food interactions are identified.
- Implementing an individualised close monitoring program for cancer patients that includes reviewing their whole treatment is essential as part of the pharmacist clinical role in the Outpatient Department.