DETECTION AND COMMUNICATION OF CONCOMITANT USE OF CAPECITABINE AND PROTON PUMP INHIBITORS

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BACKGROUND AND IMPORTANCE

Recent data suggest that the concurrent use of proton pump inhibitors (PPI) may reduce the efficacy of capecitabine by decreasing its absorption. It was associated with poorer progression-free survival (PFS) and overall survival (OS) in a secondary analysis of the TRIO-013 trial. The univariate analysis of a retrospective study of patients treated with capecitabine for colorectal cancer found that PPI use was associated with a decrease in 5-year PFS. Although the authors concluded that a significant interaction exists, after multivariate analysis, PPI use was no longer associated with worse PFS. No interaction was observed with magnesium-aluminum hydroxide containing antacid. According to this, the probability of interaction may be doubtful. However, because of the possible outcome may be serious, we suggested an intervention to alert about it.

OBJECTIVES

A protocol was implemented to detect the concurrent use of PPI in outpatients treated with capecitabine and to communicate the drug interaction to oncologists. The aim of this study was to describe this pharmacist intervention and its results.

METHODS

Pharmacists developed the following protocol:
- Identification of patients treated with capecitabine and PPI: pharmacists actively reviewed in electronic clinical records the presence or absence of PPI prescription for each patient treated with capecitabine.
- Designing an informative note: it included information about the possible drug interaction and patients identified in the previous phase. We recommended monitoring the effectiveness of capecitabine, routinely ascertaining the need for PPI use and the PPI suspension or replacement with an alternative antacid treatment, whenever possible.
- Diffusion of the information to oncologists via e-mail.

RESULTS

- During this year, we detected 71 patients treated with capecitabine.

46 (65%) patients presented concomitant use of PPI

- Omeprazole: 13%
- Pantoprazole: 7%
- Esomeprazole: 78%
- Rabeprazole: 2%

Reasons for capecitabine prescription

- Colorectal Cancer: 52%
- Gastric or Esophageal Cancer: 24%
- Breast Cancer: 11%
- Pancreatic Cancer: 13%

CONCLUSION AND RELEVANCE

Most patients treated with capecitabine were also in treatment with PPI. In our case, oncologists preferred to monitor the effectiveness of capecitabine better than PPI discontinuation. This study reflects how pharmacists, as part of the multidisciplinary team, can participate in achieving better health outcomes.