

Introduction

Pharmacists often propose during their clinical activities to stop or alter PPI treatment. PPI figure in the top 10 selling drugs in Switzerland and rank in the top 25 of drug costs in our setting. The aim of this study was to evaluate if PPI overuse is an issue in the department of internal medicine.

Design and methods

A retrospective drug use evaluation was done using data extracted from the clinical information system (Phoenix®, Parametrix AG). Patients of the internal medicine department hospitalized from March to August 2004 were included in the study. Data on PPI prescriptions were collected. As indications for PPI use were not available, relevant facts or co medications justifying the treatment (e.g. consultation of gastroenterologist or use of non steroidal anti-inflammatory drugs) were used as proxy indication. Data were cleaned and analyzed with Microsoft Excel®.

Main outcome measures were: percentage of patients receiving a PPI during their hospital stay, percentage of PPI use for incoming and discharged patients, estimation of the PPI overuse.

Results

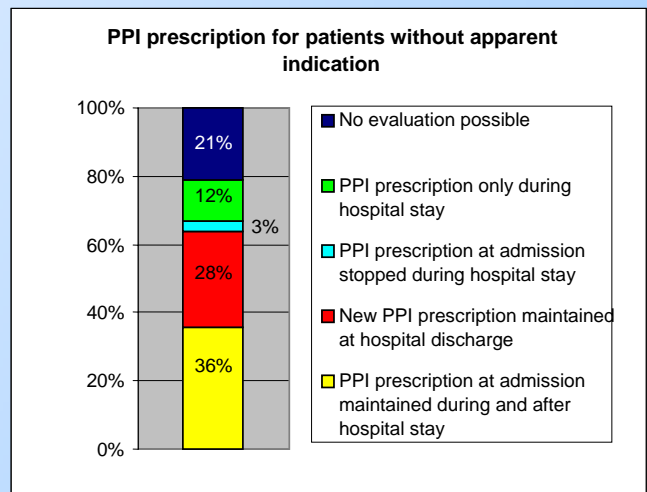
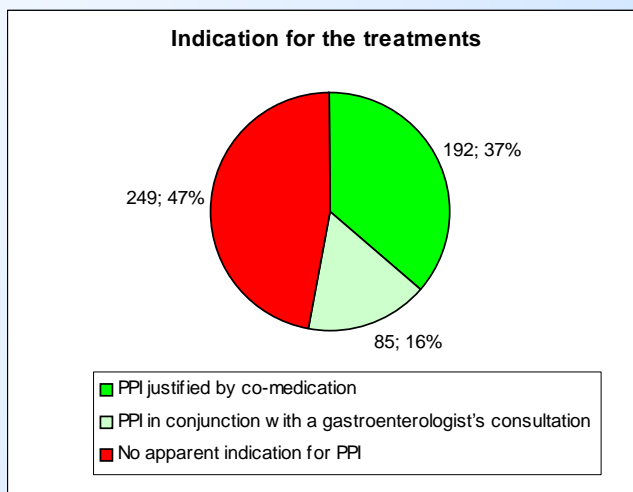
1328 hospital stays were screened: 526 patients (40%) received a PPI during their hospital stay.

Indication for the treatment with PPI:

Among treated patients with a PPI, 85 patients (16%) were treated in conjunction with a gastroenterologist's consultation and 192 patients (37 %) had a co-medication justifying the PPI prescription. **249 patients (47 %) had no apparent indication.**

Inducing role of the hospital in the prescription of PPI:

A subgroup analysis of the 249 patients without apparent indication showed that **70 patients (28%) were discharged with a PPI initiated during their stay** and that PPI treatment was stopped at discharge for only 7 (3%) patients who received a PPI before hospitalization.



Discussion and Conclusion

The main limitation of this study is use of proxy indication for treatment with PPI. One can not exclude that patients without proxy indication were treated e.g. for a pyrosis and that no indication were found in the patient's file. On the other hand, the use of the prescription software allows analyzing a much bigger dataset as one would be able to do it manually. And the fact that **40 % of internal medicine patients are treated with a PPI** is quite an astonishing result. A hand search in the files of the 70 patients who had a PPI treatment initiated during their stay without proxy indication showed that the indication for PPI treatment was not stated. **The increase of ambulatory costs induced by unjustified prescription at hospital discharge can be very important considering the duration of such treatments.** Institutional prescription guidelines particularly addressing prescription at hospital discharge and better documentation of the PPI indication in patient medication files are needed.

Acknowledgment

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