

Appropriateness of proton pump inhibitors prescription in patients admitted to a Malaysian tertiary hospital

ABSTRACT

Introduction: Proton pump inhibitors (PPIs) are one of the commonest drug prescribed, however it is not without risk of adverse effects especially if the usage is inappropriate. We aimed to evaluate the frequency, indications and appropriateness of PPIs prescription among the medical inpatients, Serdang Hospital, which is a tertiary hospital in Malaysia.

Materials and Methods: This is a retrospective cross sectional study consisting of 4953 patients admitted to medical ward from 1st July 2016 to 31st March 2017, and their database were further analysed by Statistical Package for the Social Sciences for Windows (IBM SPSS Statistics 17.0). Unpaired t-test was performed to analyze the data collected. $P < 0.05$ (two-tailed) is considered significant. Their indications were cross-referenced against the indications adapted from the United States Food and Drug Administration (FDA).

Results: 23.9% (1184/4953) of inpatients were using PPIs, and 63% (746/1184) of them recently started on PPI in the ward, with mean age of 59.7 years. More male patients were commenced on PPIs during hospitalization (P value < 0.05). Based on the FDA guideline, only 21.8% patients were indicated, 32.2% were borderline indicated, and 46.0% patients were not indicated in prescribing PPIs. Stress ulcer prophylaxis was the commonest indication, while anaemia with no evidence of gastrointestinal bleed was the main non-indication in starting PPIs. Only 11% of patients had performed the oesophago-gastro-duodenoscopy (OGDS) during the hospital stay.

Conclusion: A majority of inpatients were inappropriately prescribed PPIs according to FDA guideline. More efforts should be initiated to improve the current situation of PPIs overutilization in Malaysia.

Keyword: Proton pump inhibitor; Overutilization; Appropriateness; Malaysia